

IN THE SUPREME COURT OF INDIA
CIVIL ORIGINAL JURISDICTION

WRIT PETITION (CIVIL) NO. 833 of 2013

IN THE MATTER OF:

Aruna Roy & Anr.

..Petitioners

Versus

Union of India & Ors.

..Respondents

**REJOINDER ON BEHALF OF THE PETITIONERS TO
THE COUNTER-AFFIDAVIT FILED ON BEHALF OF
RESPONDENT NO. 2**

The Petitioners in the captioned Writ Petition most respectfully submit as follows.

1. That the captioned writ petition is connected to (i) WP (c) No. 494 of 2013 (Justice K.S. Puttaswamy (Retd) & Anr v/s Union of India & Ors) (ii) WP (c) No. 829 of 2013 (S.G. Vombatkere & Anr. v Union of India & Ors) and other Transfer Petitions filed by the Union of India namely T.P (c) No.47-48 of 2013, T.P (c) No.476 of 2013. It is submitted that by an order dated 07.10.2013, this Hon'ble Court was pleased to list the captioned writ petition with WP (c) No. 494 of 2013. It is submitted that that after the order dated 07.10.2013, all the above matters are being heard together by this Hon'ble Court. Annexed and marked hereto as 'Annexure A-1' is the copy of the order dated 07.10.2013.

2. That the common thread in all these matters is that they are filed in public interest and the core challenge in these matters is the violation of basic human rights as a result of the Unique Identification Project ("**UID Project**") being implemented by the Respondents.

3. That on 23-9-2013, this Hon'ble Court heard all the parties in (i) WP (c) No. 494 of 2013 (ii) captioned writ petition i.e. WP (c) No. 829 of 2013 and (iii) T.P (c) No.47-48 of 2013, T.P (c) No.476 of 2013 at the admission stage and granted the following reliefs:

- a) Allowed the abovementioned Transfer Petitions filed by the Union of India;
- b) Issued notice in the captioned writ petition;
- c) Directed that all the connected matters be listed together for final hearing;
- d) Passed an interim order directing that no person should suffer for not getting the Aadhaar card in spite of any circulars that had been issued by any authority making it mandatory. This Court also directed that when any person applies to get the Aadhaar Card voluntarily, it may be checked whether the person is entitled for it under the law and that it should not be given to any illegal immigrant.

4. That subsequently, the Respondents filed the counter-affidavit in response to the captioned Writ Petition attempting to contradict and deny some of the claims made, grounds taken and the reliefs prayed in the Petition.
5. That the contents of the said counter-affidavit filed on behalf of the respondents are hereby denied, unless specifically admitted hereinafter. Further, it is stated that this rejoinder is filed only to the extent it is necessary to controvert and deny the averments made in the counter-affidavit filed by the respondents and without prejudice to the facts, averments, pleas and grounds stated and urged in the captioned Writ Petition which are hereby re-iterated.
6. That before dealing with the Para-wise reply to the counter-affidavit, the submissions in the present rejoinder maintaining the challenge to the UID project may be summed up in the following paragraphs 7 through 21.
7. Ultra Vires: No legislative scheme: The Union of India through executive fiat alone and without any legislative safeguard is employing a network of private players to obtain sensitive, personal information including biometric information of residents in India, including

Indian citizens. The exercise of obtaining this information alters fundamentally the relationship between citizen and State. The State seeks to create a vast databank containing personal information that can be exploited by the State or private entities against the interest of the citizen/residents and without the knowledge of the citizen/residents. This exercise is plainly ultra vires interalia inasmuch as it is being undertaken:

- (i) Without any legislative sanction to conduct the exercise;
- (iv) Without any statutory guidance or limitation on who can collect the biometric information or how it is to be collected;
- (v) Without any statutory provision regarding how the biometric information is to be stored and secured throughout the chain beginning with acquisition of biometric data and other demographic information until the stage of storage;
- (vi) Without any statutory limitation on when the information can be used or by whom it can be used.

8. The collection of sensitive personal information including biometric information directly impacts the autonomy of an individual and his/her person. Any exercise on a national scale to secure every individual's biometrics

without any legislative safeguards on use, storage, etc. amounts to a direct and nationwide assault on individual freedom. The impugned actions violate Article 21 of the Constitution of India inasmuch as the executive arm of the State is collecting personal biometric information without any sanction of law and in the knowledge that this information can be used against individuals to impinge their liberty. The State is prevented by the Constitutional mandate from interfering in individual pursuits, community pursuits and enterprise of any type except in a manner recognized by the Constitution and provided by law.

9. Further, it is submitted that the activity of obtaining personal biometric information of an individual cannot be engaged in by the State regardless of whether or not an individual voluntarily gave this information, save and except under a valid law. Here, without any legislative backing, the State is collecting sensitive, personal and biometric information that potentially may be used for the benefit of the individual or to the detriment of the individual or even not used at all. The moment information of this type is sought to be collected by the State, under the Constitutional scheme there must be legislative backing. Absent any legislative backing, the

UID project by its very invasive nature is ultra vires and void.

10. **Unlawful & Arbitrary Exclusion:** By various Authorities insisting on possession of an Aadhaar number - which is supposedly 'voluntary' - by intended beneficiaries as a condition precedent to avail essential services due to the beneficiaries from such authorities, those Authorities are creating an irrational and arbitrary obstacle for people and particularly those people who are marginalised and vulnerable. Such unreasonable action creating an unlawful *ir-rebuttable presumption of bogusness* on the part of non-Aadhaar holders who voluntarily decided against enrolling for Aadhaar - which they are entitled to do - ; and those who could not be enrolled for Aadhaar because of various issues with the Aadhaar technology; and those others who just haven't had a chance to enrol for Aadhaar manifestly violative of Article 14 and also in excess of power assumable under Article 73 as creating irrebuttable presumptions have been held to be an essential legislative function creating a substantive law and therefore beyond the powers of the executive.

11. **No Informed Consent:** This information is being obtained by the State from unsuspecting individuals who

are merely seeking a reliable identification (ID) at the time of obtaining this information. Individuals are neither counselled nor informed that there is no statutory protection with regard to misuse of sensitive personal biometric information they are parting with.

12. Private Parties Collecting Information without

Safeguards: The personal sensitive biometric information is not being collected from residents by any statutory authority or government agency and the exercise in the field is being carried out by private entities for profit and these parties are not subject to any legislative oversight or administrative oversight by any statutory authority. Under no circumstances, much less under an unregulated, non-statutory project such as the impugned project can the State cede dominion over personal data that can severely prejudice an individual.

13. Private Dominion over Biometrics Without

Government Control: Privatisation of biometric information of millions of residents which include Indian citizens poses an enormous threat to the autonomy of an individual and his personal liberty.

14. Commercial Largesse: Private entities have been allowed to obtain this information from citizens/residents under the framework of UID Project without regard to the

immense commercial wealth of biometric information that is being captured on privately owned computers and databases over which the government has no control.

15. **Security of Collected data:** In addition to the haphazard and unreliable manner employed by the Respondents in collecting data, it appears that there is no secure manner in which the data will be stored; The UIDAI is also actively promoting 'Data Sharing Policy' with all State Governments which is strongly indicative of easy transferability of the collected information without any statutory checks.

16. **Surveillance:** There are several organizations within the government such as the Intelligence Bureau, Research and Analysis Wing (RAW), National Intelligence Grid etc which are outside the purview of legislations and are in fact exempt from disclosures under the Right to Information Act. There is a strong apprehension that these agencies can track individuals on real time basis increasing the scope of general public surveillance which is impermissible under the Constitution of India.

17. **Compromise of data security:** UIDAI has contracted out work like creation of its Central ID Repository (CIDR) to foreign firms like L-1 Identity Solutions (Safran), which are intimately connected with foreign intelligence

agencies. Also a point to note is that the French National Government owns as significant as 30% stake in Safran, the group owns two of the three companies providing biometric deduplication solutions - namely L1 Identity solutions and SAGEM Morpho. This is relevant because biometric impression of Indian citizens and residents may be easily transmitted to foreign governments who will then have access to the biometrics of Indian residents, potentially imperilling national security and severely undermining the privacy and autonomy of individuals.

18. **Invasion of Privacy and undermining human dignity:**

The UID Project as conceived and implemented results in extreme invasion of privacy and a violation of Article 21 in respect of persons who are issued an Aadhaar Card. The UID Project also assaults the dignity of the individual by compelling persons on pain of exclusion from society to part with biometric information.

19. **Coercion to part with Biometrics:** Aadhaar is being

made mandatory for basic services for all citizens. In this manner, individuals are being coerced into parting with biometrics otherwise, essential services will be withheld from them.

20. Failure to provide an option to 'Opt Out': The

Petitioners submit that in order to pass the test of reasonableness and rationality, any scheme ought to have an option to opt out. Quite apart from the issue of informed consent, the UID Project does not give an individual an option to opt out after enrolling. This itself violates article 19 and article 21 of the Constitution.

21. Unreliability of Biometrics: The biometrics collected from individuals is an extremely unreliable and unproven technology as observed elsewhere in the world. Without adequate scientific studies, the UID Project has been launched and is implemented in a hasty manner. I say that serious defects in collection of biometrics have come to light. One individual in the State of Kerala was enrolled and issued two Aadhaar numbers. In this case, the fingerprints and iris scan of the individual seem to have passed the so-called 'robust' de-duplication test of UIDAI. Annexed and marked here to as '**Annexure A-2**' is the copy of media report published in 'Moneylife' recording this incident. Apart from the unreliability of biometrics generally, for certain segments of the population biometrics in the form of finger print and iris scans are not possible to capture because of physical limitations and they are treated as 'biometrics

exceptions'. No reliable alternative method is adopted by the Respondents when issuing Aadhaar numbers to such persons and this has not only compromised the data base but is facilitating fraud. For instance, in Delhi the UIDAI has cancelled 3.84 lakh Aadhaar numbers of the total 4.10 lakh generated under the biometric exception clause. Annexed and marked here to as '**Annexure A-3**' is the copy of media report published in 'Hindustan Times' records this fact.

PARA-WISE REPLY:

22. That the contents of para 1 of the counter-affidavit requires no reply.
23. That the contents of para A of the counter-affidavit under the section "Preliminary Objections" are denied. It is submitted that the captioned Writ Petition discloses a number of Part III rights that are infringed by the continued implementation of the UIDAI project including Articles 14, 19, 20 and 21 and is therefore maintainable under Article 32 of the Constitution of India.
24. That para B of the counter-affidavit under the section "Preliminary Objections" requires no reply.
25. That the contents of para C of the counter-affidavit under the section "Preliminary Objections" are denied.

The challenge in the petition is not related to the UID project merely issuing a 12-digit random number to all residents, but in relation to the project being experiment on the entire population of the country based on unlawful, deeply flawed and effectively coerced collection, storage, sharing and use of sensitive personal data by UIDAI without ensuring the liberty for people to opt out. It is also denied that the scheme is voluntary. With various Authorities insisting on the possession of Aadhaar - even after the interim order of this Court in connected matters on 23.09.2013 prohibiting the same -, it has effectively been made mandatory thereby depriving the people of the liberty to not enrol for such a scheme.

26. That the contents of para D and E of the counter-affidavit under the section "Preliminary Objections" are denied. The Contents of the corresponding para of the writ petition is reiterated.

27. That the contents of para F of the counter-affidavit under the section "Preliminary Submissions" are full of conjectures and possibilities and are denied to be of any relevance in the instant case and are therefore not responded to herein.

28. That the contents of para G of the counter-affidavit under the section "Preliminary Submissions" are denied.

The fact that the scheme has the approval of the Government at the highest level is not relevant in the instant case. The fact that the funding requirements are authorised by the Appropriation Act is also not relevant in the present case. It is worth pointing out that the Standing Committee on Finance in its report (already part of the record) rejected the Bill and the scheme even while the funding was approved for that year.

29. That the claims in para H of the counter-affidavit under the section "Preliminary Submissions" that identification of individuals via a random 12-digit number is a logical and natural next step in making welfare schemes effective or efficient are denied.
30. That the claims in para I of the counter-affidavit under the section "Preliminary Submissions" that Aadhaar makes preparing beneficiary databases easier, and that Aadhaar makes reception of benefits more stream-lined or regular despite its pitfalls are denied.
31. That the claims in para J of the counter-affidavit under the section "Preliminary Submissions" are denied. The Contents of the corresponding para of the writ petition is reiterated.
32. That the submission in para K the counter-affidavit under the section "Preliminary Submissions" that

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activities of the UIDAI such as data collection & storage are regulated by The Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules 2011 is hereby denied. It is submitted on behalf of the Petitioners that the said Rules only apply to those entities that are "body corporate" as defined under the Explanation to Section 43A of the Information Technology Act, 2000 and that Government and its instrumentalities are not covered under the same. It is submitted that even assuming that the said Rules apply to UIDAI, those are insufficient to withstand the challenge to the unguided power that is sought to be vested in the UIDAI to engage any person to collect data on its behalf, store in any manner or transfer and share the same with any person without notice to or consent from individuals who continue to have rights, *inter alia*, of privacy in such information.

33. That it is submitted that the authorities cited in para L of the counter-affidavit under section "Preliminary Submissions" are not relevant in the instant Writ Petition. The admission in the said para that the Right to Privacy is enshrined in Article 21 is welcome. It is hereby conceded that the Right to Privacy is not an absolute right. However, it is submitted that when such a Right is

sought to be restricted, it can only be done through a procedure "established by law" as is required under Article 21. It is re-iterated that the UIDAI's activities continue without the backing of any legislation and merely by an Order of the Executive and therefore its activities that restrict and infringe the right of privacy do not qualify for the exceptions stated in the said Authorities. Both the *Sharda* and *Bhabani Prasad* cases deal with powers exercised by judicial officers which are shaped and guided by their respective codes of procedure and the Evidence Act which are both legislations unlike in the instant case where the powers of UIDAI and its agencies are not guided by any legislations. Further, it is denied that there is any "right" in favour of the Government to "identify" individually, the entire population of the country for any purpose including planning and/or efficient implementation of schemes.

34. With regard to para 1 of the counter-affidavit section "Para-wise Reply", it is denied that the scheme is voluntary. It is submitted that the consent is seldom informed, nor voluntary. As has been shown in the petition, the manner in which the scheme is being implemented clearly betrays the fact that residents are being coerced, compelled and induced to part with their

fundamental rights in order to derive social welfare benefits/subsidies for which enrolment in the impugned scheme is sought to be made mandatory. Further, the scheme does not provide an option to opt-out for those residents that enrolled by mistake or misrepresentation by any Authority as to the validity, usefulness or the nature of the Aadhaar scheme. Further, it is worth pointing out that even if one assumes that the scheme is voluntary, it does not confer constitutionality on it, as it has been held in a catena of decisions of this Court that Part III rights cannot be waived and therefore a scheme that otherwise is ultra vires the Constitution in terms of Article 13, does not become constitutional merely because some of those subject to the scheme voluntarily subjected themselves to it.

35. With regard to para 4 of the counter-affidavit section

"Para-wise Reply", it is denied that there is any mischief in the contents of the Petition that stated that "It would also act as a tool for effective monitoring of various programmes and schemes of the Government". It is humbly submitted that the same sentence occurs in the website of the UIDAI in a link titled "UIDAI Background".

36. With regard to para 5 of the counter-affidavit section

"Para-wise Reply", all the claims as to the scheme's

advantages are denied to the extent that it is necessary for the State to uniquely identify every beneficiary, and to the extent that biometric data is essential to identify every individual uniquely or that it necessarily has to be through a number, and to the extent that the way in which the scheme is implemented necessarily achieves the said goals. Further, it is again denied that such data is collected with informed and express consent from the individuals from whom such data is collected. Further, as mentioned above, the said Reasonable Security Practices and Procedures Rules 2011 falling under IT Act, 2000 is not applicable to UIDAI as it is not a "body corporate" as defined under Section 43A of the Act; and that in any case the rules are routinely given a pass. The following are some of the violations of the said Rules.

- a. Rule 4 of the said Rules is violated for want of a published policy on privacy and disclosure.
- b. Rule 5(1) of the said Rules is violated for want of written consent during collection of the data.
- c. Rule 5(7) of the said Rules is violated as Aadhaar is being made mandatory for various purposes thereby affecting the liberty of the individual to not part with the data.

d. Rule 6 of the said Rules as no consent is taken from the individual before UIDAI shares the data with any other authority (for example "data sharing policy" annexed herewith and marked as **Annexure A-4**).

e. Rule 7 of the said Rules as there is no mechanism for the UIDAI to satisfy itself that the recipient of data being shared under the data sharing policy has similar security obligations in place. The petitioner reserve their liberty to challenge the same if necessary in an appropriate proceedings.

37. With regard to para 6 of the counter-affidavit section "Para-wise Reply", it is pointed out that Annexures P-17 and P-18 in the Petition contained true copies of published reports of such failures of the system. More reports are annexed herewith. Further, it is again denied that the said IT Rules 2011 framed under the IT Act 2000 are of any relevance in the instant case. Further, it is denied that UID scheme is making the schemes more beneficial. It has been acknowledged at various times by various Government sources that introduction of UID based authentication in most schemes is requiring a near-complete re-engineering (For example, the Minutes of Meeting of the Committee on Direct Benefits Transfer

annexed herewith and marked as **Annexure A-5**). It is also denied that arrangements are made for continuing access of services and subsidies to non-Aadhaar holders. For instance, in the DBTL scheme under the Ministry of Petroleum and Natural Gas, in about 20 districts in which the scheme was launched as a pilot on 01.01.2013, non-Aadhaar holders are completely denied LPG subsidy. Further, it is denied that the Petitioners are against the use of Information & Communication technology *per se* in the functioning of the various Government Schemes as is sought to be presented by the Respondents. However, it is the Petitioners' grievance that in the garb of providing a technology fix for a vague problem; a whole population is being used as guinea pigs for an experiment which manifestly stands in violation of the Constitution in letter and spirit. Further, it is denied that it is within the powers of UIDAI to "certify" the actions of each and every scheme leveraging Aadhaar for making sure there are sufficient measures in place to continue to cater to non-Aadhaar holders as they have sought to do herein. Each and every scheme is controlled and governed by its own operating procedures and/or regulators and it is worth pointing out that UIDAI neither controls those nor is it the certifying authority for those.

Therefore it is submitted that the UIDAI's submissions that effect are not maintainable and one need not go into the merits of those.

38. With regard to para 7 in the Counter-Affidavit section "Para-wise Reply": The Contents of the writ petition are reiterated.

a. With regard to sub-para a, it is denied that all exclusion that is a result of such a scheme is desired exclusion or that UIDAI has an authority to cause such exclusion to happen without an authority of the law. Especially in relation to essential services that help guarantee Fundamental Rights such as the Right to Food, Right to Equality (both in the sense of formal equality and in the sense of egalitarian equality), Right to Education, and the Right to Equality of Opportunity etc., it is submitted that without an express authorization by a law made by the Parliament or a State Legislature, no executive authority can create an "ir-rebuttable presumption" of "fake"-ness on the part of Non-Aadhaar holders. As is admitted by the Respondents in this sub-para, those without Aadhaar are automatically sought to be excluded as being fake and the it is not open for such excluded

individuals to challenge such a presumption in any forum. Creating such ir-rebuttable presumptions have been held to be substantive law-making powers and therefore exercisable only by plenary Legislatures. (See *Izhar Ahmad Khan v Union Of India* AIR (1962) 1052 SC). Further, it is denied that the astronomical figures claimed by the UIDAI *per se* withstand the charges of co-ercion, uninformed consent, misrepresentations and threats of exclusion causing people to enrol on the basis of published reports and advertisements annexed with the Petition.

- b. Sub-para b requires no response.
- c. With regard to sub-para c, it is pointed out that the Respondents have not annexed the latest study etc. on Banking Correspondents by the RBI or any other Authority.
- d. Sub-para g requires no response.
- e. With regard to sub-para e, it is denied that the omission of other parts of the report was mischievous. As mentioned in the Petition, only those Recommendations relevant to support the Petitioner's points were cited. Further, much of the contents of that paragraph is accepted as a matter

of record to the extent that all inferences sought to be drawn in favour of the success of biometrics technology are denied. Further it is pointed out that no part of the said sub-para in the Counter-affidavit directly answers the concern of the scalability of the database, the dependence on the quality of "operating processes". Further, it is worth pointing out that the report lacks specific authorship and that the report itself is authored by UIDAI and that much of the language in the report betrays an intention to give a reply to some reports in critique of the UIDAI technology. It is submitted that the Court not rely on the same to draw any conclusions and if the Court deems necessary as to any finding of fact to that effect, in the instant Petition, which the petitioners don't feel is necessary at this point, that it constitute an independent commission for the same. Also, even based on the same report, it is denied that only 570 cases per day need to be manually reviewed for deduplication errors as has been claimed. It is pointed out that the number of duplicates returned by the system is about 0.5%, which is roughly 5000 and all of them need to be manually reviewed for

accuracy – which is nearly ten times the number being claimed. Further, it is pointed out that the concerns over the scheme causing widespread exclusion is not limited to the effectiveness of the technology involved in the enrolment process alone but also, among others, the following factors:

i. Accessibility of the enrolment processes for people who are physically challenged due to disability, disease, age, and plain simple lack of time or other reluctance.

ii. The accuracy and effectiveness of the *Authentication* technology.

f. With regard to sub-para f, the claims of risk mitigation are denied. Further, it is pointed out that the fact that the National Food Security Act, 2013 has a provision enabling the Authorities to leverage Aadhaar does not in any way enable them to make it mandatory especially at the expense of the right to food grain in quantities guaranteed under the Act. Further, it is pointed out that what is cited as “order” in the PUCL case is in fact only a record of the Court’s proceedings where the Court appears to

have quoted from the Wadhwa Committee Report on Technology in PDS and bears little relevance to the issue before the Court in this Petition.

g. Sub-paras g to k need no response to the extent that much of it are matters of record. However, inferences drawn as to the advantages and benefits of the UID scheme and/or mischief on the part of the Petitioners are denied. It is pointed out that neither the draft NIAI Bill or the Rules made under the IT Act have any relevance in the instant Petition.

39. With regard to para 8, it is stated that it is neither constitutional nor advantageous to let Authorities insist Aadhaar as a mandatory requirement for provisioning any of their services especially when there is no law requiring residents to be Aadhaar holders. Further, it is submitted that all the executive does not have such wide discretion, as to insist that some of its beneficiaries to undertake a particular activity to access their services when while there is no law mandating them to do so even when administering welfare schemes. Whether administering welfare schemes or schemes that otherwise guarantee rights to individuals, the executive is bound to act within the

limits set by the Constitution and the legislature. As mentioned earlier, it is not for the executive to create an irrebuttable presumption of falsity on the part of all non-Aadhaar holders who either voluntarily chose not to enrol – which they are lawfully at liberty to omit to do – or merely did not have the time or opportunity to enrol.

40. With regard to para 9 of the Counter-Affidavit section “Para-wise reply”, it is submitted, without prejudice to general denial on the merits of the submissions therein, that the UIDAI has no *locus* to make submissions favouring cash transfers or otherwise and are therefore not maintainable. Further, the problems of cash transfers pointed out in the Petition are reiterated herein. Paras 10 & 11 of the Counter-Affidavit section “Para-wise reply” merits no reply as it is in entirety only the Respondent’s conjecture.

41. With regard to para 12 of the Counter-Affidavit section “Para-wise reply”, it is denied that the NIPFP study is a reliable source of cost-benefit analysis study at all. It is submitted that the report not be taken cognisance of- as some of its fatal fallacies and pitfalls have been a matter of public record and the authors have admitted to the same. (A copy of the articles by

NIPFP and response Ms.Reetika Khera in Economic & Political Weekly is annexed herewith and marked as **Annexure A-6**).

42. With regard to para 14, as mentioned hereinabove, it is denied that any of the Rules made under the Information Technology Act, 2000 including the Reasonable Security Practices Rules 2011 is of any relevance qua UIDAI as they do not apply to UIDAI and further, even assuming they do, there are a number of ways in which those Rules stand violated as stated hereinabove. Further, it is denied that linking with UID has not caused exclusion. The following instances indicate the same: (The same are collectively annexed herewith and marked as **Annexure A-7**)

- i. In 20 of the 97 districts that the DBTL has rolled out, non-Aadhaar holders are no longer entitled to LPG subsidy.
- ii. Despite this Court's order on 23.09.2013, there are reports of services being denied for want of Aadhaar.

iii. Delhi Government circulars on
income certificates & EWS
admissions.

43. With regard to para A under counter-affidavit section "Reply to Grounds" which was in reply to ground A in the Petition, it is reiterated that the draft Bill or the IT Act have little relevance qua UIDAI in the instant Petition. Further, the contents of the said para are denied to the extent that it has been demonstrated in the Petition as well as herein that significant and arbitrary exclusion of rightful beneficiaries has been a direct result due to Authorities insisting that beneficiary be Aadhaar holders. Also, the Respondent's implicit admission that the said Part III rights are indeed in peril once it is demonstrated that such exclusion has been shown, is welcome.

44. With regard to para B under counter-affidavit section "Reply to Grounds" which was in reply to ground B in the Petition, it is reiterated that the draft Bill or the IT Act have little relevance qua UIDAI in the instant Petition.

45. With regard to para C under counter-affidavit section "Reply to Grounds" which was in reply to

ground C in the Petition, it is reiterated that Biometric authentication is fraught with dangers and particularly the danger of excluding rightful beneficiaries. It is denied that the statistics quoted in the said para of successful transactions allay any concerns at all. The Respondents have not cited any independent study etc. detailing the actual performance of Bio-metric authentication in terms of accuracy and efficiency. Further, the December 2011 report titled "Role of Biometrics Technology in Aadhaar" talks about the UIDAI "modelling" certain parameters adjusting for the accuracy of bio-metric matching. It is submitted that such wide powers being wielded by UIDAI will have the effect of arbitrarily excluding people from schemes in case the operating procedure of any scheme relies only on Aadhaar authentication. In a society that is yet to guarantee equality to all people in a formal and egalitarian sense, such powers are clearly in violation of Article 14 due to arbitrariness and irrationality. Further, it is submitted that the UK ID cards project indeed does share a number of similarities with UID with it aiming to give unique cards based on Bio metrics. Further, the popular

opposition to the UK ID cards scheme was rooted in a similar narrative asserting civil liberties over State power. Further, it is denied that the data collected by UIDAI is uniformly "minimal". Under the Guidelines issued to Registrars, the registrars are at liberty to collect any other data they require.

46. With regard to para D of the counter-affidavit section "Reply to Grounds", no comments are offered.

47. With regard to para E of the counter-affidavit section "Reply to Grounds", it is re-iterated that collection *per se* of sensitive personal data and storage thereof stand in violation of Articles 14, 19 and 21 of the Constitution. Reliance in this regard may be placed on the majority opinion in the Philippines Supreme Court case of *Ople v Torres* in 1998 that struck down a similar executive issuance that sought to create a national identification system without legislative backing and the Petitioner craves indulgence to quote a few lines from the said opinion.

"It is plain and we hold that A.O. No. 308 falls short of assuring that personal information which will be gathered about our people will only be processed for

unequivocally specified purposes. The lack of proper safeguards in this regard of A.O. No. 308 may interfere with the individual's liberty of abode and travel by enabling authorities to track down his movement; it may also enable unscrupulous persons to access confidential information and circumvent the right against self-incrimination; it may pave the way for "fishing expeditions" by government authorities and evade the right against unreasonable searches and seizures. The possibilities of abuse and misuse of the PRN, biometrics and computer technology are accentuated when we consider that the individual lacks control over what can be read or placed on his ID, much less verify the correctness of the data encoded. They threaten the very abuses that the Bill of Rights seeks to prevent.

The ability of sophisticated data center to generate a comprehensive cradle-to-grave dossier on an individual and transmit it over a national network is one of the most graphic threats of the computer revolution.⁶⁴ The computer is capable of producing a comprehensive dossier on individuals out of information given at different times and for varied

purposes.⁶⁵ It can continue adding to the stored data and keeping the information up to date. Retrieval of stored data is simple. When information of a privileged character finds its way into the computer, it can be extracted together with other data on the subject.⁶⁶ Once extracted, the information is putty in the hands of any person. The end of privacy begins.

Though A.O. No. 308 is undoubtedly not narrowly drawn, the dissenting opinions would dismiss its danger to the right to privacy as speculative and hypothetical. Again, we cannot countenance such a laidback posture. The Court will not be true to its role as the ultimate guardian of the people's liberty if it would not immediately smother the sparks that endanger their rights but would rather wait for the fire that could consume them.

We reject the argument of the Solicitor General that an individual has a reasonable expectation of privacy with regard to the National ID and the use of biometrics technology as it stands on quicksand. The reasonableness of a person's expectation of privacy depends on a two-part test: (1) whether by

his conduct, the individual has exhibited an expectation of privacy; and (2) whether this expectation is one that society recognizes as reasonable.⁶⁷ The factual circumstances of the case determines the reasonableness of the expectation. However, other factors, such as customs, physical surroundings and practices of a particular activity, may serve to create or diminish this expectation. The use of biometrics and computer technology in A.O. No. 308 does not assure the individual of a reasonable expectation of privacy. As technology advances, the level of reasonably expected privacy decreases. The measure of protection granted by the reasonable expectation diminishes as relevant technology becomes more widely accepted. The security of the computer data file depends not only on the physical inaccessibility of the file but also on the advances in hardware and software computer technology. A.O. No. 308 is so widely drawn that a minimum standard for a reasonable expectation of privacy, regardless of technology used, cannot be inferred from its provisions.

The rules and regulations to be by the IACC cannot remedy this fatal defect. Rules and regulations merely implement the policy of the law or order. On its face, A.O. No. gives the IACC virtually unfettered discretion to determine the metes and bounds of the ID System."

Further, it is submitted that the Petitioner reserves the right to produce before the Court other judicial decisions on the point from India & abroad. Further, it is said that the stated similarities with other existing forms of identities are misleading to the extent that :

- a) Aadhaar relies on centralisation of sensitive personal information without statutory data and privacy protection mechanisms.
- b) Aadhaar relies on centralisation of personal information making possible "convergence" of data under various databases increasing the risks of indiscriminate surveillance and loss of personal security, liberty and privacy.
- c) Further, each of the other instruments mentioned therein actually provides for an entitlement - however, mandatory requirement of

Aadhaar number creates an additional obstacle for persons who are rightfully entitled to benefit under schemes.

48. With regard to Para F in the counter-affidavit section "Reply to Grounds", it is reiterated that there is enough material to show that services are continued to be denied for want of Aadhaar under various schemes.

49. With regard to Para G in the counter-affidavit section "Reply to Grounds", it is submitted that the example of voter ID card is misplaced. It is worth pointing out that there have been no decisions in any constitutional judicial fora in India where the vices of practices of indiscriminate collection, storage and publication of personal data has been in issue. It is further re-iterated that whatever UIDAI's submissions are with respect to its security practices, they come with no guarantees and rights to people whose data is being held by UIDAI and no enforcement in the form of compensation and/or offences and penalties in the absence of a comprehensive law and therein lies one of the Petitioners' grievances.

50. That in response to Para H of the counter-affidavit section "Reply to the Grounds", it is stated that the submission is merely an assurance by the State and is therefore not met with a reply herein.

51. That in response to Para I of the counter-affidavit section "Reply to the Grounds", it is reiterated the said IT Act & Rules have no effect *qua* the UIDAI.

52. That in response to Para J of the counter-affidavit section "Reply to the Grounds", it is reiterated that while the executive power of the Union, and of the States, is co-extensive with the legislative power of the Union and the States, there are certain limits of the power on the executive. Parliament, or the legislatures, should not be rendered redundant, in the exercise of executive power. Further it must be highlighted that the proviso to Article 73 that limits the Union executive power in matters relating to List III entries of Schedule 7 to those powers that have been "expressly" granted by a law made by the Parliament. Evidently, the UIDAI exercises its power in matters relating to Entry 20 ("Economic & Social Planning"), Entry 23 ("Social Security") and Entry 45 ("Inquiries and statistics for the purposes of any of the matters specified in List II or List III")

of List III of Schedule 7 of the Constitution. It is pointed out that these two contentions have not been met with a response at all. Further, Allocation of Business Rules under Article 77(3) of the Constitution that enables the President to "make rules for the more convenient transaction of the business of the Government of India, and for the allocation among Ministers of the said business" has little relevance here given that the very question is whether or not UIDAI's activities are really the *business* of the Union Executive i.e. whether or not within its powers. Further, the Ground stated in the Petition alleged no mala-fide on the part of the Government even as it was stated therein that the Parliament would be made redundant if one were to take a view that the Executive has unbridled power to issue subordinate legislations, policies and implement schemes even as the Parliament is seized of the matter. Such practices have been critiqued and struck down by this Court in a number of decisions, and most notably in *Dr. D.C. Wadhwa & Ors vs State Of Bihar & Ors* AIR (SC) 1987 579, when it noted that:

The startling facts which we have narrated above clearly show that the Executive in Bihar has almost taken over the role of the Legislature in making laws, not for a limited period, but for years together in disregard of the constitutional limitations. This is clearly contrary to the constitutional scheme and it must be held to be improper and invalid.

53. With regard to Para K of the Counter-Affidavit Section

"Reply to the Grounds", it is stated that "Executive Instructions" are of little help as they don't confer justiciable rights on any person whose interest is affected. Reliance in this regard may be placed on a decision by this Court in *J.R. Raghupathy v State of A.P.* (1988) 4 SCC 364.

54. With regard to Para L of the Counter-affidavit section

"Reply to the Grounds", the facts and inferences therein drawn are denied. It is reiterated that what is termed as an "order" in the PUCL case, is only a Record of Proceedings of the day when the Court appears to have quoted from the Wadhwa Committee report and therefore it is submitted that it has no relevance to the present case. Further, the

constitutionality of Aadhaar was not in issue in that matter.

55. That the claims in Para N of the Counter-affidavit section "Reply to the Grounds" are denied. The Contents of the corresponding para of the writ petition is reiterated.

56. That in response to the section in the Counter-affidavit titled "Reply to the Prayer Clause" section, it is denied that the prayer is misconceived, frivolous or misleading. It is reiterated that the Petition raises important Constitutional questions and that the Prayers made therein are in order.

Hence it is prayed that this Hon'ble Court may be pleased to allow the Writ petition.

FILED BY:

FILED ON: 21.1.2014

(VIJAY KUMAR)
ADVOCATE FOR THE PETITIONER

211, N.L. Chamber
Supreme Court
New Delhi

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IN THE SUPREME COURT OF INDIA

(CIVIL ORIGINAL JURISDICTION)

WRIT PETITION (C) No. 833 OF 2013

IN THE MATTER OF :

Aruna Roy & Anr

...Petitioners

Vs.

Union Of India & Ors

...Respondents

AFFIDAVIT

I Ms. Aruna Roy D/o Jayaram, aged about 67 yrs, resident of Village and Post Tilonia, District Ajmer, Rajasthan - 305816, presently in New Delhi do hereby solemnly affirm and state as follows

1. That I am one of the petitioners and as such in that capacity fully conversant with the case and thus I am competent to swear this affidavit.
2. I submit that I have read the accompanying rejoinder that has been drafted under my instructions. I state that I have gone through the contents of the same and I find them to be true and correct to my knowledge.

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3. That I further state that the Annexures filed along with the rejoinder are true copies of their respective originals.
4. That I further declare that no part of the same are false and that nothing material has been concealed therefrom.


Deponent

VERIFICATION

Verified at, ~~Del~~ on this the 17th day of ~~May~~ 2013 that the contents of the above affidavit are true and correct to the best of my knowledge. No part of it is false and nothing material has been concealed therefrom.


Deponent

NOTARY

ITEM NO.11

Court No.5

SECTION PIL

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Amended A-1

S U P R E M E C O U R T O F I N D I A
R E C O R D O F P R O C E E D I N G S
W R I T P E T I T I O N (C I V I L) N O (s) . 833 O F 2013

ARUNA ROY & ANR

Petitioner(s)

VERSUS

UNION OF INDIA & ORS

Respondent(s)

(With appln(s) for directions and office report)

Date: 07/10/2013 This Petition was called on for hearing today.

CORAM :

HON'BLE DR. JUSTICE B.S. CHAUHAN
HON'BLE MR. JUSTICE S.A. BOBDE

For Petitioner(s)

Mr. P.S. Narsimhan, Sr. Adv.
Mr. Vijay Kumar, Adv.

For Respondent(s)

WP(C) no. 494/2012 Mr. Mohan Parasaran, SG
Mr. D.S. Mahra, Adv.

UPON hearing counsel the Court made the following
O R D E R

List this matter tomorrow, i.e. 8th
October, 2013 along with I.A. No...../2013 in W.P.
(C) No. 494/2012.

(DEEPAK MANSUKHANI)
Court Master

(M.S. NEGI)
Court Master

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ANN A2

-Aadhaar de-duplication myth busted. Any answers, Mr Nilekani?

MONEYLIFE DIGITAL TEAM | 15/10/2013 05:52 PM

One person from Kerala enrolled and successfully received two Aadhaar numbers. This raises serious question over the de-duplication theory and practices of UIDAI

Aadhaar or the unique identification (UID) number is being enforced by the governments and the de-facto tagging institution, the Unique Identification Authority of India (UIDAI) by claiming uniqueness of the number. However, one person from Kerala has busted the myth created by UIDAI and its chairman Nandan Nilekani.

According to a report in Matrubhoomi, a Kerala-based newspaper, PV Narayanan, a resident of Panatthadi *panchayat* received *two* Aadhaar numbers: 548780623023 and 356459270677. The names on both these letters issued by UIDAI are same, with slight different photos. Narayanan probably may have registered at two places or centres. But, surprisingly, his fingerprints seem to have passed the so-called 'robust' de-duplication test of UIDAI. Since Aadhaar includes an iris scan, this too seems to have been missed.

As *Moneylife* has pointed out, both the union government and UIDAI were in such a hurry that they neglected the basic principle of pilot testing and size of sample. For over 1.2 billion UID numbers, they have used data from just 20,000 people, in pairs, as the sample and on the basis of the results, gone ahead with

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the UID number through the 'Aadhaar' project. (How UIDAI goofed up pilot test results to press forward with UID scheme)

The case of Narayanan also mocks the false positive identification rate (FPIR) theory of UIDAI. Earlier, speaking about the FPIR, the UIDAI had said, "We will look at the point where the FPIR (i.e. the possibility that a person is mistaken to be a different person) is 0.0025%". This means, for every 1 lakh comparisons, there would be two and a half false positives. On a large scale, it means for a population of over 120 crore, there would be 18 lakh crore false positives, or, for every single Indian resident there would be 15,000 false positives! (Click to see the calculations)

The International Biometric Group (IBG) testing also shows that performance can vary drastically within technologies-some fingerprint solutions, for example, had next to no errors during testing, while others rejected nearly 1/3rd of enrolled users. "Most interestingly, the testing shows that over time, many biometric systems are prone to incorrectly rejecting a substantial percentage of users. Verifying a user immediately after enrolment is not highly challenging to biometric systems. However, after six weeks, testing shows that some systems' error rates increase ten-fold," said the research, consulting and integration firm, which works closely with the biometric industry. The report is titled "Real-World Performance Testing".

Maybe the UIDAI and its registrar have thought the second enrolment of Narayanan from Kerala as false positive and issued another Aadhaar number. Hope the UIDAI chairman would be able to find out 'original and true' Narayanan from these two biometric-based Aadhaar numbers!

hindustantimes

Saturday, October 19, 2013

Chetan Chauhan, Hindustan Times

New Delhi, December 25, 2012

First Published: 19:26 IST(25/12/2012)

Last Updated: 02:26 IST(26/12/2012)

Print

Ann A3
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UIDAI cancels 3.84 lakh fake Aadhaar numbers

Some have managed to beat the so-called unbeatable Unique Identification (UID) system and got fake Aadhaar numbers generated raising security concerns over UPA's new UID based governance model.

Nandan Nilekani led Unique Identification Authority of India (UIDAI) has cancelled 3.84 lakh Aadhaar numbers of the total 4.10 lakh generated under the biometric exception clause.

The Aadhaar agencies are allowed to enroll people without proper finger-prints or iris under the biometric exception clause.

In this, the agencies are required to provide photographs of the non-existent biometrics along with demographic details of the enrollers.

The biometric exception was incorporated to make Aadhaar truly inclusive identification generation process as there was highly level of exclusion in other systems such as ration cards.

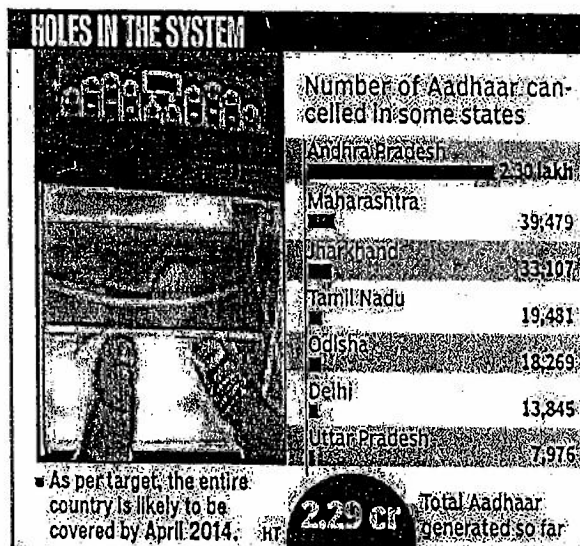
But, the agencies exploited the clause to make some pass money as for each successful enrollment and generation of Aadhaar number, the agency got ₹ 50.

It was business as usual for UIDAI till a large number of Aadhaar letters in Andhra Pradesh remained undelivered.

"Most of the 45,000 undelivered Aadhaar letters in Andhra were under the exception clause. It hinted that something was wrong," a senior UIDAI official said. Further scrutiny revealed that of 48.80 lakh Aadhaar generated in Andhra, 2.30 lakh were false and were subsequently cancelled.

With the lid blown off, similar instance cropped in other states.

A Delhi government official said, who reported around 13,000 fraudulent enrollments to UIDAI, said the biometric exception was introduced for people with high level of disabilities but it was frequently used raising a question over credibility of Aadhaar numbers.



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The UIDAI admitted of similar high number of fake Aadhaar numbers from Jharkhand, Maharashtra, Tamil Nadu, Tripura and Uttar Pradesh in a reply to Lok Sabha.

The authority also found of the total Aadhaar generated under this clause, only 22,195 were found to be genuine. Another 6,600 Aadhaar numbers are under investigation.

For enrollment of around 90 crore residents in subsequent phases, the UIDAI has asked agencies not to opt for biometric exception without approval from a senior, preferably a government official.

The UPA government has decided to use Aadhaar payment platform for delivery of its welfare schemes once the enrollment is complete likely by April 2014.

<http://www.hindustantimes.com/StoryPage/Print/980634.aspx>

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ANNEXURE-BDATA SHARING POLICY

UIDAI embarked on a multi-Registrar model for enrolling the residents with the intent to have the reach and ability to enrol the residents at a reasonable pace.

Registrars are entities who, in the normal course of their activities, deal with residents in the delivery of benefits and services to them. The Registrars carried out enrolments under the aadhaar project through Enrolment Agencies appointed by them. These Registrars already have data bases and collect data from their customers/beneficiaries for discharging the responsibilities cast up on them under various policies, statutes or rules. The Registrars partnered with the UIDAI to avail the opportunity of cleansing their data bases through fresh enrolments of residents in accordance with the UIDAI processes.

In some States where the non-State Registrars were active, State Registrars are facing problems in leveraging aadhaar for delivery of benefits (which is the basic intent of aadhaar project) since data of residents of the State enrolled by the non-State Registrars was not available to the State Registrars. Many State Registrars have had reservations about the involvement of Non State Registrars in the enrolment exercise in absence of any clarity as to how they would be able to access the data of residents enrolled by Non State Registrars. The Enrolment Refresh Committee had also mentioned about the need of sharing of data with such Registrars.

In such a scenario, a policy on data sharing policy assumes an important dimension; wherein on one side, there are concerns regarding privacy, data protection, data security, etc, and on the other hand, there is demand from various State Registrars for the data to enable them leverage the UID for improving the services.

With the above in consideration, it has been decided that UIDAI would share the Resident data, subject to the following conditions:

1. UIDAI would share the data only in such cases where the resident has given the consent for sharing data.
2. The data will be UID generated processed data.
3. The data will be shared on receipt of a formal request from the State concerned. The request will explicitly include the purpose for which the data is required and specific data requirements.
4. States may request data pertaining to their own state only. The data shared will be based on state specified in the resident address.
5. The selective data in specific format, as defined by UIDAI, will be shared as per the validity of the request in a secured manner using appropriate offline and/or online mechanisms.
6. The data would be shared with State Registrars only for the purpose of improvement of delivery of welfare and public services, it also being the intent behind the aadhaar project and the purpose for which the consent has been given by the resident at the time of enrolment.

7. Demographic data may be shared with Financial Institutions (Banks, etc) for opening of Bank accounts and/or linking the accounts with aadhaar, as consented by the resident at the time of enrolment or subsequently.
8. Data may also be shared as warranted under any Act/ Statute/ Regulation of Govt of India and/or any Cabinet Decision in this regard.
9. State Registrars may use the shared data with their various departments for the purpose of improving delivery of their welfare and public services but the Nodal Department shall be responsible for ensuring Security compliance.
10. The Registrar packet will not be generated, if Registrar does not ask for it.
11. UIDAI may also consider enabling electronic KYC mechanism where an authorized entity can send a request to UIDAI to share demographic data and photo for a specific resident, in the long run. This mechanism will require the said entity to send resident data sharing consent along with resident authentication factor (biometric/OTP). UIDAI will share data after successful resident authentication. UIDAI will define set of authorized entities who will be allowed to avail this service, at the appropriate time.
12. Updates should be allowed to flow to agencies with whom UIDAI shared the data initially as per resident consent from time to time.
13. The necessary framework and institutional safeguards as per the IT Act 2000 and all guidelines/rules/enactments of the Government of India for ensuring the data safety and security at all times would be put in place by concerned Registrar before sharing of any data. Registrar will sign a **"Data protection and Understanding of holding sensitive data"** agreement with UIDAI. Among other things, the Agreement will include various required compliances for the following security guidelines and any other security guidelines as the UIDAI may deem fit:-
 - a. Strategic control of the data shall always remain with the Registrar who shall be responsible for the overall security and proper use of the data at all times.
 - b. Data shall be stored and transmitted in encrypted form.
 - c. Biometric data shall not be decrypted except for the time when it is being used. Under no circumstances, the biometric data of a resident shall be sent as part of any response to any verification request.
 - d. Registrar shall have a physically secure location to store /house the shared data, with strict security protocols and protection from unauthorised access. The facility should have appropriate access control and audit trails.
 - e. Physical, Network and Application level security for the software that uses this data shall be ensured.
 - f. State Registrar shall remove the biometric data if "resident" moves out of the state and informs the state.
 - g. The data should not be retained beyond the duration necessary to serve the purpose for which it was meant to be used.
 - h. Failure to comply with any of above obligation shall be deemed a serious breach by the Registrar concerned with whom data was shared by UIDAI and the said Registrar shall destroy the shared data within the time specified by UIDAI, without prejudice to any damages, which UIDAI may seek.

Office of Adviser (Admn.)
CD/CF No. 30.40.3/13
Date 19/8/13
Planning Commission, New Delhi

PRIME MINISTER'S OFFICE

South Block,
New Delhi - 110 011

Subject: Summary Record of Discussions of the meeting of National Committee on Direct Benefit Transfer held on 5.8.2013

Please find enclosed, for further necessary action, a copy of the Summary Record of Discussions of the meeting of National Committee on Direct Benefit Transfer held on 5.8.2013.

(Sanjay Lohiya)
Director

Tel. No: 2301 8876

1. Home Secretary
2. Finance Secretary (Secretary, D/o Expenditure)
3. Secretary, D/o Financial Services
4. Secretary, D/o Posts
5. Secretary, D/o Electronics & IT
6. Secretary, D/o Rural Development
7. Secretary, D/o School Education & Literacy
8. Secretary, D/o Higher Education
9. Secretary, M/o Social Justice & Empowerment
10. Secretary, M/o Tribal Affairs
11. Secretary, M/o Minority Affairs
12. Secretary, D/o Health & Family Welfare
13. Secretary, M/o Labour & Employment
14. Secretary, D/o Women and Child Development
15. Secretary, M/o Petroleum & Natural Gas
16. Secretary, D/o Fertilizers
17. Secretary, D/o Food & Public Distribution
18. Director General, UIDAI
19. Secretary, Planning Commission
20. Mission Director, DBT, Planning Commission
21. Registrar General of India

PMO ID No. 360/31/C/34/2012-ES.2 (Vol-12)

Dated 13.8.2013

Copy to: Smt. Nidhi Khare, Advisor, Planning Commission

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Summary Record of Discussions of the 4th Meeting of
the National Committee on DBT
held at 7, RCR at 6.00 p.m. on 5.8.2013

List of members present is at *Annexure-1*.

2. The Prime Minister opened the proceedings by asking the Principal Secretary to PM to present the items on the Agenda.

3. Principal Secretary to PM made a detailed presentation covering the four items listed in the Agenda. The four Agenda items covered were:

Agenda 1: Review of the Rollout of DBT in Phase-I (43 districts), Phase-II (78 districts), DBT-LPG (20 districts) and Online Postal Banking Services.

Agenda 2: Routing of funds in Centrally Sponsored Schemes or Central Sector Schemes where beneficiary identification and maintenance of beneficiary lists is done at the state level or below - either directly from Government of India to beneficiaries OR through state governments.

Agenda 3: Transfer of LPG Subsidy through DBT - the continuation of the two-price system of sale of LPG cylinders and the timeline for switchover to a single price.

Agenda 4: The next Phases of Rollout of LPG Subsidy through DBT

A copy of the presentation made by the Principal Secretary is at *Annexure-2*. The main points in the presentation are covered below.

4. Agenda 1: DBT Rollout Review:

Principal Secretary gave an overview of the rollout of DBT so far, including the level of digitisation of databases, the level of Aadhaar and bank account penetration of beneficiaries, the number and value of DBT transactions and the challenges that continue to be there. Some of the main points made by him were:

- i. **Data Quality:** Currently, only data on DBT going through APB and CPSMS is captured and reported easily. Transfers taking place through NEFT outside of these two systems have to be manually collected and collated. This highlights the necessity of quickly moving to an Aadhaar based payments system (APB &

CPSMS), otherwise, the true benefits of DBT in terms of improving processes and speeding up transfers will not happen.

- ii. **Dominance of a few large schemes:** If the data of beneficiaries is broken up further, of the 39.76 lakh beneficiaries covered, JSY and the 4 post-matric scholarships account for ~33 lakh beneficiaries (83%).
- iii. **Database digitization:** This continues to be a challenge. Having digitised databases is the starting point for any DBT. In many schemes, beneficiary lists were never ever collected or compiled at the central level. For many schemes, DBT was the first time they started checking lists. Departments will need to start the process of digitisation in all districts, irrespective of the rollout of DBT as this is a critical activity which need not wait and can be done in parallel.
- iv. **Re-engineering processes:** The crux of the problem is that re-engineering of processes has not happened and must be an absolute priority if DBT is to expand any further. Doing the next set of districts will be impossible if process re-engineering is not done and one will face all the bottlenecks we have been facing so far. This has to be the top-most priority for the programme.
- v. **Aadhaar Enrolment:** Enrolment in Aadhaar has caught up in Phase-I and is excellent now. In Phase-II, it is less than 25% in 14 districts which is a matter of concern. These districts are in UP, Bihar, Chhattisgarh, Gujarat and Uttarakhand. Aadhaar enrolment in UIDAI districts is no longer a constraint.
 - a. There are 160 districts with >50% coverage
 - b. There are 160 districts with 25% - 50% coverage
 - c. There are 300 districts with <25% coverage
- vi. **NPR Biometric collection:** RGI has to work hard in UP, Bihar, Chhattisgarh, West Bengal, Odisha, J&K and NE states to improve coverage.
- vii. **Bank Account opening:** Opening accounts is happening. However, there are difficult pockets where this needs to be tackled.
- viii. **Post Office Banking System:** The rollout of Core Banking is badly behind schedule. The tender for placing orders for handheld devices has been cancelled and is yet to be placed. It is not likely that the postal system will be ready for

S1 (162)

any form of DBT (except in AP which has a different system in place) till March 2014.

- ix. **Seeding of bank accounts:** This is a problematic area. Till this is done, funds will not flow through APB which means there is no reliable way of checking whether DBT is happening or not.

5. **Agenda 2: Funds Flow Routing:**

Principal Secretary pointed out that there is a need for clarity on the funds transfer goal of DBT. Is the goal to ensure direct transfer of funds to the beneficiary through an electronic process directly from the Central Government or is this to be done through the least number of layers, and in some cases through states, depending on the nature and features of the scheme. A decision on this necessary because a variety of issues had been raised by departments and states including the level of cooperation from state governments, the level of state contribution, lack of administrative and technical capacity, accounting for committed liability of states, collection of beneficiary data is with states and there should be no separation of responsibility from authority. He mentioned that doing DBT directly from the Centre has some advantages in that there is a clear identification of the benefit with the Central Government, schemes can be tracked much better and scholarships and pensions can be released more often and in a timely manner. If a DBT system is in place with due re-engineering, states can route their benefits also in the same manner. The National Committee has to decide whether the funds flow to the beneficiary should be directly from the centre or through the states or other intermediate levels.

6. **Agenda 3: Timeline for switchover to a single price in DBT-LPG**

Principal Secretary mentioned that DBT in LPG has proved to be successful. In the 20 districts it is operating in, there are 72.3 lakh consumers of whom 16.6 lakh consumers are getting subsidy through DBT. There have been 32.6 lakh transactions in 2 months transferring Rs 131 crores. The challenge is bank account seeding which varies between 25% - 55%. The switchover from a dual price system to a single price system is due from the cut-off date of 3 months (1.9.2013). This will provide a sense of urgency and make people share their details and speed up seeding. If the date is postponed, DBT-LPG will be impossible to rollout in the rest of the country as consumers will be sure of further postponements and there will be no sense of urgency to the DBT-LPG programme.

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7. Agenda 4: The next Phases of Rollout of DBT- LPG:

Secretary, Petroleum made a presentation on the current status of DBT-LPG rollout and a possible way forward in rolling it out in future. His suggestion was that DBT-LPG could be rolled out in 146 districts where Aadhaar penetration is currently >50%. This could be done in a phased manner till March 2014 and the rest of the country could be covered subsequently. A copy of his presentation is at *Annexure-3*.

Discussion - Main Points

8. There was a detailed discussion on all the agenda items. Some of the points made by the Ministers on the main issues for decision were:

i. Rollout:

- a. There are many problems and inadequacies that still need to be addressed as DBT is expanded further.
- b. Digitisation databases and collection of databases at the Centre is not happening as much as it should. Many Ministries continue to say that they do not have lists.
- c. Re-engineering of processes, which is essential for successful DBT, is not taking place. Re-engineering is necessary and will need to be done.
- d. DBT brings immense benefits through elimination of duplication, removing falsification, huge savings and timely delivery to beneficiaries.
- e. It is time to crack the whip and move faster for which it is necessary to take hard decisions and implement them.
- f. Banks have been issued instructions to directly get Aadhaar numbers of account holders.
- g. Any future rollout will need to be completed by 31.12.2013.
- h. Many schemes have dynamic and not static lists which means lists have to be compiled periodically. There are difficulties in updating and transferring data to the centre.
- i. There is no technical reason why digitised lists cannot be there, whether they are static or dynamic.
- j. DBT is not direct to bank account only but direct to family of beneficiary
- k. Practical experience in Andhra Pradesh has shown that Post Offices have delivered and not banks. Bank seeding is a real bottleneck. Decisions on Banking Correspondent compensation need to be transmitted to banks.

- l. If D/o Posts empowers Post Master Generals to sign up technology service providers, things can move faster through Post Offices.
- m. Post Offices are not an immediate solution. Banking Correspondents are a post-bank / bank account matter. The DBT Mission should address BC issues for the medium term. At the moment, the focus should be on bank accounts.
- n. There is a need for a complete IT solution which identifies benefits, eligibility criteria and has a workflow based approval and funds release system.
- o. Small schemes should be universalised under DBT.

ii. Funds flow:

- a. Ideal DBT is one that transfers directly through the CPSMS and APB. This should be the ultimate aim.
- b. Direct is not necessarily direct from Delhi as states provide much more in many schemes.
- c. It is impractical to have two pipes for funds flow, one for the centre and one for states. This would be counter-productive.
- d. Insisting on transfers from the centre will slow down DBT rollout.
- e. DBT was clearly conceived as a scheme for routing funds directly to the beneficiary from the centre.
- f. There is the problem of addressing committed liability of states in schemes.
- g. Non-digitisation leads to a lot of corruption. People need to know how much is being given and who is giving the benefit. Therefore DBT should be direct from the source.

iii. Time line for switchover to single price for DBT-LPG

- a. There should be no postponement of the switchover to a single price system for LPG sales after the 3 month transition period.

iv. DBT-LPG Rollout

- a. There is a need for visible impact and DBT-LPG is the one with the maximum visibility and impact.
- b. Rollout of DBT-LPG should be much faster covering 142 districts by 1.9.2013 and 150 districts by 1.11.2013.

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- c. 80% is the maximum number of consumers who will come forward with Aadhaar details. The rest may be duplicate consumers or may not be interested in the subsidy.
 - d. Rolling out DBT-LPG needs a preparatory period and bank seeding is a constraint in rolling out
 - e. OMCs have complete digitised lists and have no constraints.
 - f. LPG is one scheme which can have immediate nation-wide impact. It can easily cover 50% of the country.

Decisions

9. After the detailed discussion in which all the above points were elaborated and discussed, it was decided that:

i. The timeline for switchover to a single price in DBT-LPG:

- a. The OMCs will be allowed to discontinue sale of cylinders at subsidized rates to consumers who have not reported their bank account and Aadhaar numbers and have not had their accounts seeded with Aadhaar numbers by 31.8.2013, i.e., the completion of the three month switchover period, in the 20 districts where DBT-LPG has been in operation.
- b. They will continue to be eligible to get their subsidy through DBT as soon as they report their bank account and Aadhaar numbers and have had their bank accounts seeded with Aadhaar numbers.
- c. For each subsequent expansion to new districts, OMCs will give a grace period of 3 months from the date of rollout for the switchover to a single price and discontinuing sale of cylinders at subsidized rates to consumers.

ii. The next Phase of Rollout of DBT-LPG

- a. Further expansion of the programme for DBT of LPG subsidy will be finalized by Minister, MoPNG in consultation with the Finance Minister after the meeting to be held by Mission Director on 13.8.2013. This would be communicated by 16.8.2013.

iii. Funds Flow

- a. The Executive Committee will examine all 25 selected schemes in DBT and the 3 pension schemes of NSAP, to recommend, within September

SS

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2013, which schemes need to continue to send the central share through the State Consolidated Fund or any other intermediate agency in 2013-14.

iv. Further Rollout of DBT

- a. The Executive Committee will also recommend, within September 2013, the possible rollout plan for the 25 selected schemes and the 3 pension schemes of NSAP beyond the current 121 districts.

The meeting ended with a Vote of Thanks to the chair.

List of participants

1. Shri P. Chidambaram, Finance Minister
2. Shri Ghulam Nabi Azad, Minister of Health & Family Welfare
3. Shri M. Veerappa Moily, Minister of Petroleum & Natural Gas
4. Shri Kapil Sibal, Minister of Communication & IT
5. Shri Sis Ram Ola, Minister of Labour & Employment
6. Kum. Selja, Minister of Social Justice & Empowerment
7. Shri Jairam Ramesh, Minister of Rural Development
8. Shri V. Kishore Chandra Deo, Minister of Tribal Affairs
9. Shri M.M. Pallam Raju, Minister of Human Resources Development
10. Shri K. Rehman Khan, Minister of Minority Affairs
11. Dr. M.S. Ahluwalia, Deputy Chairman, Planning Commission
12. Shri Nandan Nilakeni, Chairman, UIDAI
13. Smt. Krishna Tirath, MoS(I/C) of Women & Child Development
14. Shri K.V. Thomas, MoS(I/C) of Consumer Affairs, F&PD
15. Shri Srikant Jena, MoS(I/C) of Chemical & Fertilizers
16. Shri Ajit Seth, Cabinet Secretary
17. Shri R.S. Gujral, Finance Secretary
18. Shri Anil Goswami, Home Secretary
19. Smt. Sindhushree Kullar, Secretary, Planning Commission
20. Smt. Vibha Puri Das, Secretary, Ministry of Tribal Affairs
21. Shri S. Vijayakumar, Secretary, Ministry of Rural Development
22. Shri J. Satyanarayana, Secretary, Department of Electronics & IT
23. Shri Mrutyunjay Sarangi, Secretary, M/o Labour & Employment
24. Shri Ashok Thakur, Secretary, Department of Higher Education
25. Ms. Nita Chowdhury, Secretary, D/o Women & Child Development
26. Shri K.N. Desiraju, Secretary, M/o Health & Family Welfare
27. Shri R. Bhattacharya, Secretary, D/o School Education & Literacy
28. Shri Vivek Rae, Secretary, M/o Petroleum & Natural Gas
29. Shri Rajiv Takru, Secretary, Department of Financial Services
30. Shri Ravi Mathur, Secretary, Ministry of Minority Affairs
31. Shri Sudhir Bhargava, Secretary, M/o Social Justice & Empowerment
32. Shri Vijay S. Madan, DG, UIDAI
33. Ms. Kalpana Tewari, Member (Planning), D/o Posts

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34. Dr. R.C. Chandramouli, Registrar General of India
35. Shri S. Sundaresan, Mission Director, DBT
36. Smt. Nidhi Khare, Advisor, Planning Commission

From PMO

1. Shri Pulok Chatterji, Principal Secretary, to PM
2. Shri Pankaj Pachauri, Communication Advisor
3. Shri B.V.R. Subrahmanyam, JS to PM
4. Smt. Anu Garg, JS to PM
5. Shri Sanjay Lohiya, Director

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MEETING OF THE
NATIONAL COMMITTEE
ON

DIRECT BENEFITS TRANSFER
(DBT)
PROGRAMME

5 August 2013

APPROVED ROLLOUT PROGRAMME

FOR 25 SELECTED SCHEMES

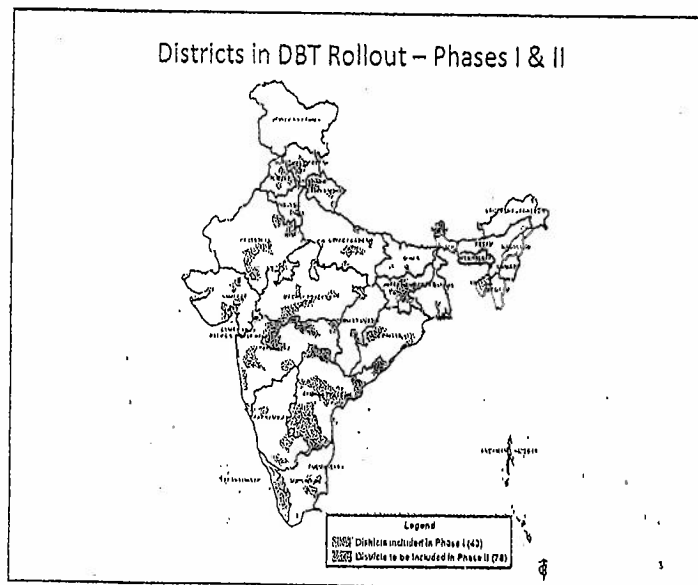
PHASE 1 FROM 1.1.2013: 43 DISTRICTS

PHASE 2 FROM 1.7.2013: 78 DISTRICTS
(45 UIDAI, 33 NPR)

TOTAL 121 DISTRICTS IN 26 STATES/UTs

59

05-08-2013.



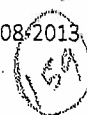
**NATIONAL SOCIAL ASSISTANCE
PROGRAMME OF MORD**

Widow Pension Scheme
National Disability Pension Scheme
National Old Age Pension Scheme

DBT to roll out from 1.7. 2013 in 121
Districts

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05-08-2013



25 SCHEMES, 121 DISTRICTS

AS ON 31.07.2013

- 39.76 LAKH BENEFICIARIES
- 56% HAVE BANK ACCOUNTS
- 25.3% HAVE AADHAR AND BANK ACCOUNTS
- 9.62% BANK ACCOUNTS SEEDED

5

25 SCHEMES

FROM 1.1.2013 TO 31.7.2013

- 3.18 LAKH TRANSACTIONS THROUGH DBT
- RS. 135.18 CRORES

6

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05-08-2013

National Social Assistance Programme

Upto 31.7.2013

- 16.73 LAKH TRANSACTIONS
- RS. 57.77 CRORES

AADHAR/NPR PENETRATION

AS ON 31.7.2013

- PHASE 1
 - 39/43 DISTRICTS > 60%
 - 4/43 DISTRICTS BETWEEN 50-60%
- PHASE 2
 - 42/78 DISTRICTS > 60%
 - 15/78 DISTRICTS BETWEEN 50-60%
 - 7/78 DISTRICTS BETWEEN 25-50%
 - 7/78 DISTRICTS BETWEEN 10-25%
 - 7/78 DISTRICTS < 10%

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33 DISTRICTS OF NPR

AS ON 31.7.2013

• TARGET WAS TO ACHIEVE MORE THAN 70%
COVERAGE BY 30.6.2013

- 15/33 DISTRICTS ACHIEVED < 60%
- 7/33 DISTRICTS ACHIEVED < 10%
- 5/33 DISTRICTS BETWEEN 10-25%

Challenges in DBT

❖ Opening Bank Accounts

- Banks not present everywhere
- Postal system nowhere near being ready for DBT

❖ Seeding Bank Accounts

- ❖ Process re-engineering by Departments to facilitate DBT on large scale – still poor

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NEXT PHASE OF ROLLOUT

- PERHAPS 50-100 DISTRICTS (TO BE CHOSEN ON BASIS OF AADHAR/NPR COVERAGE) FROM 1.10.2013 AFTER STABILIZATION OF DBT IN 121 DISTRICTS
- SMALLER SCHEMES COULD PERHAPS ROLL OUT COUNTRYWIDE
- RECOMMENDATION IN SEPTEMBER 2013

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DBT FOR LPG SUBSIDY

- APPROVED PROGRAMME:
 - IN 20 DISTRICTS FROM 15.5.2013
 - IN 51 DISTRICTS OF PHASE 1 WHEN AADHAR ENROLMENT OF CONSUMERS CROSSES A THRESHOLD

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05-08-2013

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DBT FOR LPG SUBSIDY

AS ON 31.7.2013

- 20 DISTRICTS IN 10 STATES/UTs
- TOTAL NUMBER OF CONSUMERS: 72.3 LAKHS
- NUMBER OF CONSUMERS GIVEN SUBSIDY THROUGH DBT: 16.6 LAKHS
- TOTAL SUBSIDY TRANSFERRED THROUGH DBT: RS. 131 CRORES
- AADHAR PENETRATION > 65% IN ALL 20 DISTRICTS
- BANK ACCOUNT SEEDING: 25-54%

13

POST OFFICES

- 16,000 POST OFFICES IN 51 DISTRICTS OF PHASE 1
- INCLUSION IN CORE BANKING SYSTEM AND ICT ENABLEMENT WAS TO BE ACHIEVED BY 30.9.2013
- DATE HAS NOW SLIPPED TO 31.3.2014

14

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STEPS TAKEN TO ENABLE DIRECT TRANSFER FROM CENTRE

- ONLINE SYSTEM FOR CREATION OF DIGITIZED
DATABASES OF BENEFICIARIES
- AADHAR PAYMENT BRIDGE SYSTEM (APBS)
 - DBT MIS SYSTEM
- CPSMS NOW FACILITATES PAYMENT THROUGH
APBS, NECS AND NEFT
 - STANDARDIZED FORMATS
 - ELECTRONIC PAYMENT ADVICE

15

STEPS TAKEN TO ENABLE DIRECT TRANSFER FROM CENTRE

- CPSMS NOW ALSO FACILITATES
SCHEMewise MIS
- CONFIRMATION OF TRANSFER
THROUGH CPSMS IS DEEMED
UTILIZATION CERTIFICATE

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05-08-2013



- GENERAL APPROVAL FOR DIRECT TRANSFER OF CENTRAL SHARE FROM CENTRAL MINISTRY TO BANK ACCOUNT OF BENEFICIARY

❖ INSTRUCTIONS ARE FOR:

- COLLECTING AUTHENTICATED BENEFICIARY DATA / DATABASES FROM STATES
- RELEASE BENEFITS DIRECTLY FROM CENTRE THROUGH DBT

- DRAFT CABINET NOTE BY PLANNING COMMISSION

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PERCEIVED ADVANTAGES OF DIRECT TRANSFER FROM CENTRE

- Clear identification of benefit with Central Government
- Schemes can be tracked much better
- Targeted delivery
- Timely delivery
- Elimination of delays in receiving UCs
- Elimination of dependence on States for Introducing DBT

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05-08-2013

OBJECTIONS FROM MINISTRIES TO DIRECT TRANSFER FROM CENTRE

• MoSJE AND MoTA

- SCHEMES ENVISAGE THAT STATES WILL BE IMPLEMENTING AUTHORITY AND BE RESPONSIBLE FOR IDENTIFICATION OF BENEFICIARIES, TIMELY PAYMENTS, ETC.

- SUBSTANTIAL PART OF THE PAYABLE SCHOLARSHIP IS BORNE BY THE STATES
 - CONCURRENCE OF THE STATES IS NECESSARY
 - MINISTRIES HAVE ONLY SKELETON STAFF
- NO SYSTEM OF RECEIVING LISTS OF BENEFICIARIES FROM STATES

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OBJECTIONS FROM MINISTRIES TO DIRECT TRANSFER FROM CENTRE

• MoTA

- ARCHITECTURE OF POST MATRIC SCHOLARSHIP SCHEME DUE FOR MAJOR REVAMP

• MoHFW

- JANANI SURAKSHA YOJNA FUNDS ROUTED THROUGH STATE AND DISTRICT HEALTH SOCIETIES

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OBJECTIONS FROM MINISTRIES TO DIRECT TRANSFER FROM CENTRE

• MoRD

- DIRECT FLOW FROM CENTRE WILL SEND WRONG POLITICAL SIGNALS
- STATE CONTRIBUTION IS OFTEN MUCH MORE THAN CENTRAL CONTRIBUTION
- SIGNIFICANT PAYMENTS MADE THROUGH POST OFFICES, MONEY ORDERS AND CASH
 - MONEY SHOULD FLOW TO THE STATE CONSOLIDATED FUND WITH PENALTIES ON STATE FOR DELAYED TRANSFER

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OBJECTIONS FROM MINISTRIES TO DIRECT TRANSFER FROM CENTRE

- JANANI SURAKSHA YOJNA OF MoHFW
- POST MATRIC SCHOLARSHIP FOR SC STUDENTS OF MoSJE
- POST MATRIC SCHOLARSHIP FOR OBC STUDENTS OF MoSJE
- PRE MATRIC SCHOLARSHIP FOR SC STUDENTS OF MoSJE
- POST MATRIC SCHOLARSHIP FOR ST STUDENTS OF MoTA

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OBJECTIONS FROM MINISTRIES TO DIRECT TRANSFER FROM CENTRE

- THESE 5 SCHEMES ACCOUNT FOR 83% OF BENEFICIARIES IN 121 DISTRICTS
- THREE PENSION SCHEMES OF MoRD UNDER NSAP ALSO INCLINED TO TRANSFER THROUGH STATES
- IMPLICATION: ALMOST ALL CENTRAL FUNDS WILL CONTINUE TO FLOW THROUGH STATES AND NOT DIRECTLY

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OBJECTIONS FROM STATES TO DIRECT TRANSFER FROM CENTRE

- CM TAMIL NADU
- OPPOSED TO DIRECT TRANSFER FROM CENTRE
- DIRECT TRANSFER WILL DIVORCE RESPONSIBILITY FROM ACCOUNTABILITY
 - MANY ARE ONLY PILOT SCHEMES
- DBT WILL BECOME UNMANAGEABLE AND CREATE ADMINISTRATIVE PROBLEMS
- SHOULD ROUTE ALL FUNDS THROUGH STATE GOVERNMENT

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05-08-2013

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OBJECTIONS FROM STATES TO DIRECT TRANSFER FROM CENTRE

• ANDHRA PRADESH

- HAVE A BETTER WAY OF DOING DBT FROM
STATE LEVEL

25

DUAL SYSTEM OF PAYMENT OF LPG SUBSIDY

- BY DBT THROUGH APBS
- SUBSIDIZED CYLINDER ON CASH PAYMENT (TO END BY
31.8.2013)
- ❖ WITHOUT A FIXED CUT-OFF DATE TO MOVE TO
SINGLE PRICE SYSTEM, CONSUMERS HAVE NO
INCENTIVE TO HAVE ACCOUNTS SEED.
- ❖ IN CASE SWITCHOVER DATE IS POSTPONED,
UNIVERSALIZATION OF DBT-LPG WILL BE DIFFICULT AS
CONSUMERS WILL BE SURE THAT THE 3 MONTHS
SWITCHOVER PERIOD IS EXTENDABLE.

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DUAL SYSTEM OF PAYMENT OF LPG SUBSIDY

- ❖ IF SUBSIDIZED CYLINDER ON CASH
PAYMENT IS DISCONTINUED FROM
1.9.2013, CONSUMERS WILL REMAIN
ELIGIBLE FOR SUBSIDY THROUGH DBT.

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DECISION 1

- SHOULD DIRECT TRANSFER OF CENTRAL SHARE
TO BANK ACCOUNTS OF BENEFICIARIES BY
CENTRAL MINISTRIES FOR SELECTED SCHEMES BE
MADE MANDATORY?
- OR
- SHOULD IT BE LEFT TO THE MINISTRIES TO
DECIDE WHETHER THEY WANT TO CONTINUE TO
SEND CENTRAL SHARES THROUGH STATE
GOVERNMENTS OR OTHER INTERMEDIATE
AGENCIES?

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05-08-2013



DECISION 2

- SHOULD OMCs BE ALLOWED TO DISCONTINUE SALE OF CYLINDERS AT SUBSIDIZED RATES AFTER 31.8.2013 IN THE 20 DISTRICTS?
* OR
- SHOULD THE DATE BE EXTENDED BEYOND 31.8.2013 AND THE OMCs BE ASKED TO CONTINUE WITH THE DUAL SYSTEM OF LPG SUBSIDY PAYMENT?

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Thank You

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Annexure - III

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07-08-2013

MEETING OF THE
NATIONAL COMMITTEE
ON
DIRECT BENEFITS
TRANSFER
(DBT)
PROGRAMME
5 AUGUST 2013

AGENDA ITEM 4

Rollout
of LPG subsidy
by
DBT

145

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07-08-201

Current Aadhaar Saturation*

Current/Future Aadhaar Roll Out				Already launched	Not launched
#	Present Aadhaar Saturation	Number of Districts	Months Reqd. To Reach 90% saturation		
1	>90%	20	Done		
2	80-90%	32	2-3		
3	70-80%	36	3		
4	60-70%	31	6		
5	50-60%	46	8		
6	40-50%	44	8-12	0	44
7	30-40%	73	12-18	0	73
8	20-30%	65	18-24	0	65
9	10-20%	60	24-32	0	60
10	<10%	242	24-32	0	242
TOTAL		650		20	630

ASSUMPTIONS: 1. The above timelines are based on current pace of enrolments
 2. The actual timelines may vary depending on any changes in processing capacity at UIDAI.
 3. The enrolment timelines for RGI districts is subject to confirmation by them.

* Source - UIDAI
3

Proposed Schedule

Phase	Aadhaar Saturation	Number of Districts	Timeline
I	>80%	20	Already Launched
II	>50%	146	2013-2014
III	30-50%	117	2014-2015
IV	<30%	367	2014-15 and 2015-16

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07-08-2013

Phase II

	Number of Districts	Aadhaar Saturation	Launch on
a.	36	>80%	1.10.13
b.	34	70-80%	1.12.13
c.	30	60-70%	1.1.14
d.	46	50-60%	1.2.14

TOTAL OF 146 DISTRICTS WILL BE UNDER
PHASE-II OF DBTL DURING FY 13-14

Risk Factors Under Phase II

- Current Aadhaar seeding levels near zero.
- Inadequate seeding levels in LPG/Bank database when grace period ends especially for Phase II (a) and (b) districts - may lead to consumer unrest/law and order problems nearing end of grace period.
- Aadhaar saturation <80% in 76 Phase II(c) and (d) districts when scheme is launched in January/February 2014.

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07-08-20:

Learning from Phase I

- ▣ Required around 6 months to reach 60% seeding in LPG database in 20 districts
- ▣ Preparatory Activities – requires 3 months
 - IEC (SMS, FM, Paper, Aakaashvani, door to door)
 - District wise Training of Dealers/field officers, Workshops on DBTL (seeding process/ RASF verification)
 - Meetings with Collectors
 - Setting up of District Level Committee and IEC by district administration after that.

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Challenges Ahead

- ▣ Expeditious conversion of EID to UID and delivery of Aadhaar letters
- ▣ Returned Transactions to be reduced to <0.1% (0.5-0.8% currently).
- ▣ Actionable and standardized return codes by banks.
- ▣ Single Point of contacts for wrong transactions in banks
- ▣ Lack of visibility to consumer on Bank Seeding process - LPG seeding is visible on website/call centre.
- ▣ Call centre for banks/NPCI for Aadhaar seeding/mapping issues

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NIPFP macro
finance

ANN A-6A

A cost-benefit analysis of *Aadhaar*

National Institute of Public Finance and Policy *

November 9, 2012

Abstract

This study estimates the costs and benefits of *Aadhaar*. We find that substantial benefits would accrue to the government by integrating *Aadhaar* with schemes such as PDS, MNREGS, fertiliser and LPG subsidies, as well as housing, education and health programmes. The benefits arise from the reduction in leakages that occur due to identification and authentication issues. Our analysis takes into account the costs of developing and maintaining *Aadhaar*, and of integrating *Aadhaar* with the schemes over the next ten years. Even after taking all costs into account, and making modest assumptions about leakages, of about 7-12 percent of the value of the transfer/subsidy, we find that the *Aadhaar* project would yield an internal rate of return in real terms of 52.85 percent to the government.

*The spreadsheet for the cost benefit analysis, with the details of the assumptions and calculations has been released on the web, at <http://goo.gl/JziwaV>. This will assist other researchers and policy analysts to modify key assumptions and explore alternative outcomes.

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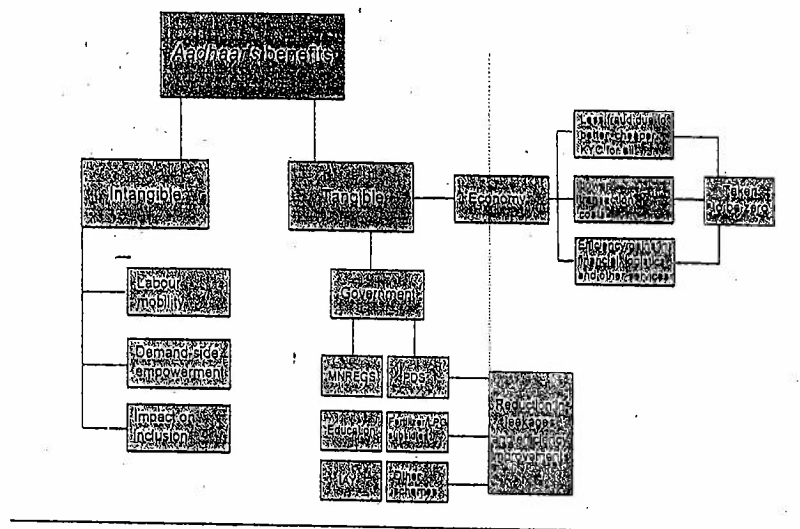
1 The question

In recent months, there has been considerable debate about the *Aadhaar* programme. Scepticism has been expressed about whether the expenses of the programme are justified.

By our estimates, the NPV of the expenses required in building *Aadhaar* (and integrating it with the government programmes: Public Distribution System (PDS), Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS), fertiliser and LPG subsidies, education (Sarva Shiksha Abhiyan (SSA) and Mid-day Meal (MDM)), Indira Awaas Yojana (IAY), Janani Suraksha Yojana (JSY), Accredited Social Health Activist (ASHA), Integrated Child Development Scheme (ICDS), pensions and scholarships works out to Rs. 37,186 crore rupees.

Given the magnitude of these expenses, it is important to obtain clarity about the extent to which benefits outweigh costs.

Figure 1 Mapping *Aadhaar*'s benefits



A full fledged cost benefit analysis of *Aadhaar* is hampered by two problems. First, many of the gains from *Aadhaar* are difficult to quantify as they are intangible (see Figure 1). A main benefit of *Aadhaar* is that it can make many of the existing

government programmes more demand-led, empowering the beneficiaries to hold the programmes accountable for their entitlement. For example, in PDS, once beneficiaries are enrolled with the system, it becomes easier for them to claim their benefits because they can authenticate their presence as beneficiaries. It also reduces leakages due to better matching of supply with demand. In another example, if the poor are able to access mobile-phone based payment systems, through which payments can be obtained or made at the cost and convenience of sending or receiving an SMS, this would be a revolution in financial inclusion.

Further, with non-digitised, local information on workers seeking jobs, an important aspect of the labour market, namely labour mobility is adversely affected. *Aadhaar* will make the migration experience in search of jobs easier by giving an identity to migrants in their destination locations. Similarly, rights and entitlements can be decoupled from the location of the resident. For instance, transaction costs involved in enrolling for a ration card in a new town/village/city in India are enormous. This entitlement is often forgone and it imposes high levels of opportunity cost for mobility. Such costs are expected to be driven down with a national identification mechanism and *Aadhaar* can play this role effectively. However, the gains from these are not easily quantifiable.

Second, in the case of specific schemes for which benefits are tangible, such as the MDM programme, while a reasonable case can be made that the use of *Aadhaar* in MDM will reduce leakages, the present state of knowledge does not permit precise quantification of the gains.

Hence, the approach taken in this paper is to use available information for government schemes such as PDS and MNREGS, where the literature has estimated some leakages. Then we use the learnings to make some assumptions for a few other schemes for which similar studies are scarce. Even for PDS and MNREGS, the studies are not always of the current year, and there have been technological and other changes that may have improved the efficiency of the schemes. For example, in MNREGS, the requirement that all wage payments should be made through a bank account reduces leakages that are inherent in cash disbursements. So, for PDS and MNREGS, the estimates are also adjusted to reflect the improvements that should have happened since the studies were conducted.

We consider the leakages due to identification and authentication errors that *Aadhaar* can address, i.e., the existence of duplicates and "ghost" beneficiaries. The benefits of reduction in leakages due to *Aadhaar* from these programmes are compared against the costs of building and integrating the various schemes with *Aadhaar*. Once the *Aadhaar* infrastructure is set up, since integration with the schemes may take some time, we assume that the benefits accrue with a lag.

Finally, we estimate the costs and benefits of *Aadhaar* to the government, in terms of expenses incurred by a government agency and the reduction in leakages respectively. Any reduction in leakages is considered a benefit, because the money can then be utilised for its real purpose i.e., for the targeted beneficiaries, or if the reduction in leakages leads to a reduction in the overall government expenditure required for the respective scheme, it is a benefit because the money can then be utilised in other programs. There are gains to the economy as a whole as well, which we set to zero in the current analysis.

Besides the ones considered, there are numerous other government schemes and programmes with the main mandate as some kind of transfer from the government to a citizen or resident. A report by the Consultative Group for Assisting the Poor (Breloff and Rotman, 2011) estimates that in 2008-2009, 22 welfare schemes paid out a total of about Rs. 3,25,000 crore. As more information becomes available on other schemes, the analysis can be expanded to include the true returns of the *Aadhaar* project.

2 Estimation of cost

There are two categories of costs involved in the *Aadhaar* project. First, the capital and operations expenditure for establishing and maintaining *Aadhaar* are taken into account. Second, the cost of integrating *Aadhaar* with various government schemes are factored into the estimation.

Capital and operating expenditure for developing and maintaining *Aadhaar* are obtained from the budget estimates of *Aadhaar*. The costs available in the budget are for a period of 7 years, i.e., from 2010-11 to 2016-17, with a projected enrolment trajectory achieving a coverage of 1.13 billion individuals by 2018. For the subsequent four years (from 2017-2018), we have adjusted the capital and operations expenditure of *Aadhaar* to reflect the steady state costs of maintaining *Aadhaar*. Note that since the enrolment responsibility is now equally divided between the Unique Identification Authority of India (UIDAI) and the Registrar General of India (RGI), the costs of *Aadhaar* enrolment may turn out to be lower.

Integration costs vary from one scheme to another. They take the form of capital and operations expenses incurred for developing and maintaining the infrastructure for authentication using *Aadhaar* and, in most cases, for integrating the respective scheme's database with *Aadhaar*, doing the required application development, and maintaining a database management system. For most programmes, it is assumed that integration requires similar capital infrastructure such as biometric

terminals and operations expenses on maintenance, connectivity and training. For programmes that involve payments through banks, the cost of providing incentives to the banking channels are taken into account. Thus for these schemes, it is assumed that the banking channel will be paid a percentage of the value transferred as an incentive.

Biometric terminals have been depreciated at 33 percent (straight-line) per year with the replacement cost reducing every three years. Application development and consulting costs are incurred in the first few years, and database management and support costs are assumed to be steady state costs. The spreadsheet provides details on these cost assumptions. The remaining costs have been assumed at 2011 prices, with no decrease over time. Appendix A provides detailed estimates of integration costs.

3 Estimation of benefits

Aadhaar is potentially useful for reducing leakages in a large number of government programmes. In this analysis, we estimate the gains for some government programmes that can benefit through integration with *Aadhaar*. We start by looking at PDS and MNREGS because of the existence of research literature and better data availability. We then extend the analysis to other schemes where we make assumptions on the leakages based on the aforementioned schemes. An estimation of leakages helps us understand the reduction of costs that will come about through the use of *Aadhaar*.

3.1 Public Distribution System (PDS)

The PDS system is envisaged to provide food to 65 million households (GOI, 2011e). Studies report large leakages and diversions of subsidised food grains. GOI (2005b) reports that 58 percent of the subsidised food grains issued does not reach targeted beneficiaries. Of course, some of the sources of leakage in PDS such as theft of grain in the supply chain cannot be solved using *Aadhaar* alone.

One of the reasons for this loss has been identification errors in the PDS delivery system. These identification errors may be due to many reasons. For example, beneficiaries may be non-existent ("ghost"), or may be duplicates, i.e., have obtained multiple identities for the purpose of obtaining subsidies. Admittedly, the problem of beneficiaries being incorrectly classified is a third identification error, but we assume that this problem cannot be solved using *Aadhaar* (Khera, 2011b).

Multiple sources point to different data on identification errors.¹ However, for the purpose of this discussion, we rely on the conclusions drawn by GOI (2005b), according to which diversion of subsidised grains to non-existent ("ghost") beneficiaries was reported at 16.67 percent.² We assume that utilising *Aadhaar* in PDS can help in combating this component only.

This estimate is somewhat fuzzy. A careful microeconomic analysis of PDS is urgently called for to arrive at better estimates of these critical system features. For instance, problems such as ghost beneficiaries may be only a partial source of leakage of PDS food grains (Khera, 2011b).

We adjust the estimate downwards by 25 percent to account for improvements in the system that may have taken place since the report was published. Thus the benefit through reduction in leakages assumed is 12.5 percent of the subsidy.

The total food subsidy for the year 2010-11 is Rs. 58,500 crore (GOI, 2012b). We adjust the value downwards by 30 percent to account for subsidies in the form of back-end costs, which are not consumer subsidies, for which exact data is not available.

The expenditure on kerosene subsidies in 2010-11 was around Rs. 19,600 crore (Nilekani, 2011). NCAER (2005) suggests that 38 percent of PDS kerosene does not reach its intended recipients (Rangarajan *et al.*, 2006; Business Standard, 2005). However, the report does not suggest what part of this leakage may be due to ghost or duplicate beneficiaries. Therefore, the proportion of leakage in PDS kerosene which may potentially be addressed by *Aadhaar* is assumed to be similar to the case of PDS food grains (GOI, 2005b). This estimated leakage is 11.1 percent of the subsidy. Again, the estimate is adjusted downwards by 25 percent to account for improvements in the scheme since the study was conducted. So, the benefit from integrating with *Aadhaar* is assumed to be 8.3 percent of the value of the expenditure on PDS.

Beyond these benefits, the integration of *Aadhaar* with PDS may also have benefits that are intangible at present and may not be immediately quantifiable. A case in point is that of the "portability" of benefits: *Aadhaar* being a universal (and portable) identification number may allow the government to offer portable subsidies irrespective of which state a beneficiary is in (UIDAI, 2010). However, this claim needs to be carefully studied before any attempts at quantifying this are made. For instance, operationalising a portable identity which links *Aadhaar* to the benefits of PDS will likely be a challenge in a scenario where the supply of subsidised commodities is linked to the previous months' demand (Khera, 2011b).

3.2 Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS)

The MNREGS programme is envisaged to provide 100 days of employment to all rural households. The cost of wages under the scheme constitutes about 70 percent of the total scheme expenditure. In 2011-12, the wage expenditure bill of the government was to the tune of Rs. 24,864 crore (GOI, 2011h). In order to ensure that this money reaches the intended beneficiaries, the MNREGS guidelines stipulate various transparency and accountability measures in the form of issuance of job cards, maintenance of muster rolls, monitoring and implementation systems and regular social audits. Despite these measures, studies indicate that implementation problems have been encountered in various states.³

A key problem with the implementation of MNREGS is diversion of funds, through ghost beneficiaries and inflated/ fake work records. Based on data collected from 8 states,⁴ Chauhan *et al.* (2009) found a great deal of fraud such as making of fake job cards and improper maintenance of muster rolls.⁵ The report however does not quantify the leakages caused on account of these problems. A series of state-level social audits have made attempts to record these anomalies.

An audit conducted by the Centre for Planning, Monitoring and Evaluation in 19 districts of Orissa during 2007-2008 (CPME, August 2008) found that muster rolls reflected 8.6 percent ghost beneficiaries, 23.1 percent ghost person days and only 61 percent of the claimed wage payments had actually been received by workers.⁶ Arguably, Orissa reflects the extreme end of the spectrum and other states like Andhra Pradesh, Tamil Nadu, and Rajasthan have been much more effective in taking measures to check corruption under MNREGS (Dréze *et al.*, 2008). While state-wise variations in the implementation of the scheme are inevitable, problems similar to those found in Orissa have also been identified in other social audits albeit with varying intensity. Uttar Pradesh⁷ (Dhuru, 2007), Jharkhand⁸ (CDE, 2007b) and Chattisgarh⁹ (CDE, 2007a) are some states for which similar audit reports are available.

Using the data from these various surveys, we estimate that a leakage of approximately 12 percent is being caused to the government on account of ghost workers and manipulated muster rolls.¹⁰ We assume that 5 percent of the leakages can be plugged through wage disbursement using *Aadhaar*-enabled bank accounts and 7 percent through automation of muster rolls.

In addition to the benefits estimated above, integration of *Aadhaar* with MNREGS can lead to several other advantages that cannot be monetised. SPS (2009) notes that use of *Aadhaar* can be combined with wireless networks to register work

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applications online. This will make actual work demand visible on the network for those monitoring the programme. The sanctioning of materials for carrying out work under MNREGS can also be linked to the *Aadhaar* system. Real time data on the number of labourers engaged in the project through *Aadhaar* authentication will allow supervisors to keep track of the materials required and therefore check pilferage. *Aadhaar*-based authentication can also be used in conjunction with the bank correspondent model to ensure more efficient access to their funds by MNREGS beneficiaries (SPS, 2009).

3.3 Education

SSA and MDM are the government's flagship programmes in the field of primary education. Under SSA, the government pays for schooling facilities, teacher's salaries, textbooks and uniforms for children. The MDM programme addresses their nutritional requirements through provision of cooked meals. The allocation of benefits under these schemes is on the basis of enrolment figures provided by each state.

The introduction of MDM and SSA is noted to have contributed greatly to improved enrolments in schools (GOI, 2010a). However, PROBE (1998) cautions that official enrolment data compiled from school records is often prone to exaggeration on account of under-age enrolments, nominal enrolment of children who do not actually attend school, double enrolment of children who attend private schools, and fake enrolment of ghost beneficiaries. Kumar and Rustagi (2010) observes that *"in many instances, enrolments figures are fudged for a variety of reasons including the pressure to report universal enrolment, the opportunity to get additional allocations of food and other materials that can be siphoned out, and sometimes even the need to retain a teacher's post."*

The government has to face losses in the form of wasteful expenditure and leakages arising due to inflated enrolment data. *Aadhaar* can help address this concern by providing a robust tracking mechanism to monitor the enrolment and attendance of students. On the one hand this will help address the problem of inflated enrolments of fictitious students and on the other, it will allow for real-time monitoring of the benefit distributions using attendance records. Any unused resources available with the school due to student absenteeism can be therefore be adjusted by the central government while making subsequent allocations to the state. In addition, the use of *Aadhaar* in the PDS distribution system will help plug leakage of food grains, which are to be disbursed to schools through the Food Stamp Programme (FSP). We assume that the integration of *Aadhaar* with the MDM scheme in the manner contemplated above will enable the government to save approximately 10 percent of the costs that it currently incurs on the scheme.

Leakages also exist in the distribution of books, scholarships, uniforms and bicycles to students under education schemes, which can be addressed by linking the distribution of these benefits with *Aadhaar* (GOI, 2012i). In the absence of data on the extent of leakages that exist on account of fake and duplicate beneficiaries, we have assumed this figure to be 10 percent of the total expenditure incurred by the government on books and uniforms for school children.

Use of *Aadhaar* can also help address a major problem that has been repeatedly noted with the SSA scheme - the problem of teacher absenteeism (Accountability Initiative, 2011; GOI, 2009b). States that have reported high rates of absenteeism include Madhya Pradesh where it was found that two-thirds of the teachers did not attend schools, Uttar Pradesh where the proportion of absent teachers was 20 percent, and Bihar, which reported figures of 25 percent (GOI, 2009b). A separate study found that 14 states were grappling with teacher attendance rates between 75 and 85 percent (GOI, 2009a). Keeping these studies in mind, we have assumed 10 percent absenteeism by teachers employed under SSA across the country. Thus the benefit of integrating with *Aadhaar* is taken to be 10 percent of the value of the transfers in this scheme.

To estimate the benefits of integration with *Aadhaar*, the expenditure for teacher salaries, books and uniforms is taken as Rs. 16,491 crore in 2011-12 (GOI, 2011i);¹¹ and for MDM, it is taken as Rs. 9,128 crore in 2010-11 (GOI, 2012a). For the latter, we take 85 percent of the value to account for administrative expenses.

3.4 Fertiliser subsidy

The government prescribes the maximum price at which fertilisers may be sold. These prices are usually lower than the cost of fertilisers or the cost of importing them. The government subsidises the manufacturing and import of fertilisers to ensure that they are sold at the maximum price the government has set. Most of the subsidy amount is released to the manufacturer or importer when the fertilisers are received at district level, and the remaining is released when the fertilisers are sold to the dealer or retailer. The fertiliser moves from the producers/importers, to wholesalers/dealers, to retailers, and eventually to the farmers. In 2010-11, the entire subsidy bill for fertilisers amounted to about Rs. 62,301 crore (GOI, 2012c).

At present, there is no mechanism for identifying and authenticating the individual farmers who receive these fertilisers. This creates potential for diverting the fertilisers towards non-agricultural uses, which is a problem because the subsidies are justified by the agricultural use. The system also suffers from inefficiencies because of the low level of automation. For using *Aadhaar* to limit diversion and

other leakages, and for improving the efficiency in the system, the pre-conditions to be fulfilled are: policy decisions that mandate defining eligibility criterion for beneficiaries of the subsidies; and development of a database that helps identify the individual farmer purchasing the fertiliser.

The Task Force on Direct Transfer of Subsidies on Kerosene, LPG and Fertiliser has proposed a three phase process of moving towards direct transfer of subsidies into the bank accounts of the beneficiary farmers (Nilekani, 2011). Once this process has been implemented, it should be possible to directly transfer the subsidy amount into the bank account of the farmer, when the farmer buys the fertiliser. This should be possible with adequate technology infrastructure. With every retailer, there should be a device that authenticates the farmers. The information then flows directly into a database that is linked to another system that activates the decision to transfer money into the account of the farmer. Such a system should help ensure that diversion and leakages are reduced, and the efficiencies in the system improve with time. There are no comprehensive studies on the losses due to leakages and inefficiencies in this subsidy schemes. Using the estimates for PDS and MNREGS as benchmarks, we assume that using such an *Aadhaar*-enabled system would result in a benefit of 7 percent of the total value of subsidies.

3.5 LPG subsidy

The government subsidises the rate at which LPG cylinders are available for household consumption. The price of LPG cylinders meant for commercial use is not subsidised. There are reports of widespread diversion of LPG cylinders towards commercial use, and other forms of leakages in the system. For example, it is possible that some households may be using the subsidised LPG cylinders for non-household purposes. The total subsidy bill for the government in the year 2009-10 was Rs. 16,071 crore (Nilekani, 2011).

Though at present there are no limits on the number of LPG cylinders a household may use, it may be a good idea for the government to limit the level of subsidy by putting a cap on the number of cylinders, as has been recommended by the Task Force on Direct Transfer of Subsidies on Kerosene, LPG and Fertiliser (Nilekani, 2011). Subsequent to such a policy decision, it will become important to identify and authenticate individuals who are using LPG cylinders. For this *Aadhaar* can play a crucial role. *Aadhaar* database can be linked with the database of households using LPG cylinders, and the individuals purchasing the cylinders can be authenticated. This would help minimise the leakage and diversion of cylinders meant for household consumption.

Even if the government does not take the policy decision of putting a cap on household consumption of LPG cylinders, biometric authentication of individuals purchasing cylinders would help keep track of where the cylinders are being used. This itself can help minimise the diversion of cylinders. Of course, if the government does not cap the number of cylinders to be used by households, it would be possible for households to purchase the cylinders and sell them in the market, as one would expect in a market with two prices for the same product (a subsidised price and a non-subsidised price). Even after accounting for such diversion, the leakage and diversion done by the distributors and retailers should reduce just by identification and authentication using *Aadhaar*.

Though there are reports of raids finding extensive use of subsidised LPG cylinders for commercial purposes (TERI and IISD, 2012), there are no comprehensive studies documenting the extent of leakage and diversion. In the absence of such robust studies estimating the leakage from the system towards commercial use, we assume that use of *Aadhaar* would result in a benefit of 10 percent of the value of the subsidy (similar to PDS).

3.6 Indira Awaas Yojana (IAY)

Under this scheme, the government provides grants to identified households below the poverty line in rural areas for the construction and upgradation of houses. The targeted beneficiaries include those belonging to the scheduled castes and tribes, minorities, freed bonded labourers, disabled persons, former members of the paramilitary forces and family of military personnel killed in action. The construction assistance provided is Rs. 45,000 per unit in plain areas and Rs. 48,500 in hilly areas (GOI, 2011a). The number of houses under construction sanctioned during the year 2010-11 was 19,52,914 (GOI, 2010b). Hence we calculate that the value of financial assistance given was Rs. 8,788 crore. The disbursement of funds takes place through bank and post office accounts (GOI, 2012j).

Some reports highlight that there is corruption in this scheme, leading to leakages of IAY funds. Funds are allotted to multiple members of the same family, the benefit is given twice to one beneficiary, houses are allotted to government officials, bribes have to be paid, and middlemen create inefficiencies (GOI, 2010c; IFMR, 2009; Ahmad, 2009). Though exact numbers for leakages are not known, since the disbursement takes place through bank accounts, there can be leakages due to fake beneficiaries as well as the existence of "ghosts", which *Aadhaar* can plug. We assume that leakages are of the order of 10 percent which can be reduced by using *Aadhaar*-enabled accounts.

3.7 Other schemes

We include other government schemes in the analysis where integration with *Aadhaar* can reduce leakages that arise due to identification errors. Since the transfer of benefits takes place through bank or post office accounts in these cash transfer programmes, we assume that having *Aadhaar*-enabled bank accounts will result in a benefit of 7 percent of the value of the transfer. The schemes considered are:

3.7.1 Scholarships

A number of scholarship schemes have been put in place by the government to support meritorious students belonging to disadvantaged backgrounds. In several cases the scholarships are disbursed directly to the bank or post office account of the student so as to ensure that payments are made in a timely and correct manner (GOI, 2010d). Disbursing payments through *Aadhaar*-enabled bank accounts will make the process more efficient and prevent funds from being diverted to bogus bank accounts. We use the aggregate government expenditure of Rs. 4,519 crores on various scholarship schemes to compute the cost savings through integration with *Aadhaar*.¹²

3.7.2 Pensions

Studies find that overall leakages in social pension schemes, particularly old age pensions, are relatively lower than other government programmes. However, leakages do take place in some areas due to duplication and fake entries, and because those who have died are not removed from the records and their benefits continue to be claimed (Dutta *et al.*, 2010; Dutta, 2008).

Pensions are paid through bank accounts in most cases. Here, duplicates and "ghosts" can exist. Where disbursement is through money order or cash, (Dutta, 2008), *Aadhaar* can play a role in reducing leakages in payments. It will also help in keeping accurate records which reduces the possibility of diversion of funds to non-beneficiaries.

We use the budget allocation for the National Social Assistance Programme (NSAP) of Rs. 5,110 crore for the analysis (GOI, 2012d).¹³

3.7.3 Janani Suraksha Yojana (JSY)

This is a safe motherhood intervention under the National Rural Health Mission (NRHM) intended to promote institutional delivery among the poor pregnant women. It is entirely sponsored by the central government and has special dispensation for states that have low institutional delivery rates,¹⁴ classified as Low Performing States (LPS) (as against High Performing States (HPS)). The scheme provides cash assistance to all eligible mothers for delivery. The link between the health facility and the community is the Accredited Social Health Activist (ASHA) (GOI, 2011b).

The coverage of JSY in 2010-11 stands at 113.38 lakh women, spread across LPS and HPS.¹⁵ The expenditure under the scheme for the same period was Rs. 1,600 crore (GOI, 2011b). It is assumed that this expenditure is the entire payout amount under this cash transfer scheme, although it is possible that there are administrative and management costs involved (UNFPA, 2009). However, since JSY is part of the larger NRHM project, it is assumed that the scheme's administrative costs are relatively negligible, and the major costs are in fact subsumed by the latter.

3.7.4 Accredited Social Health Activists (ASHA)

According to GOI (2011g), there are an estimated 7,30,909 ASHAs in India.¹⁶ The ASHA is a health activist who acts as the link between the community to the health care system. The initiative is designed to create awareness on health issues, motivate the community, and help improve access to basic health services. Appointed under NRHM, ASHA workers are usually female, and are accountable to the village panchayat. ASHAs receive performance-based compensation for carrying out various activities, including promoting universal immunisation, referral and escort services for reproductive and child health, and other programmes. There are general guidelines for the appointment of ASHAs, but states have the discretion to customise to their own requirements (GOI, 2005a).

The maximum compensation an ASHA can receive is approximately Rs. 17,200 in a year, assuming that the entire range of services are provided. However, studies suggest that this number varies across states (Bajpai and Dholakia, 2011), and the average amount of incentive per ASHA is lower annually. At an average of Rs. 12,000 per annum, we compute the total expenditure on payments to ASHAs as Rs. 877 crore.

3.7.5 Integrated Child Development Centres (ICDS)

Anganwadi centres have been created under the ICDS and are part of the public health care and education system. These centres cater to the development needs of children in the age group of 3-6 years, including through pre-school education, as well as provide health and nutrition counselling and care to infants and children up to the age of 3 years, and pregnant and lactating mothers (GOI, 2005a). Anganwadi centres are staffed with anganwadi workers (AWW) and anganwadi helpers (AWH). As of 31 March 2011, according to GOI (2011j), 11,74,388 AWWs, and 11,04,098 AWHs were in position.¹⁷

AWWs and AWHs are paid an honorarium which is decided by the government. According to GOI (2011f), the Cabinet Committee on Economic Affairs has revised the honoraria amounts to Rs. 3,000 per month (for AWWs) and Rs. 1,500 per month (for AWHs).

4 Internal rate of return

The calculations in this document are summarised in Table 1. The internal rate of return in real terms generated by *Aadhaar* is 52.85 percent.

The analysis shows that the IRR will depend on how comprehensive and rapid the integration of these programmes with *Aadhaar* is going to be.

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Table 1 Cost-benefit analysis of Aadhaar

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total cost	270	12,00	2,265	2,674	3,696	3,853	4,423	4,272	4,871	4,828	4,835
Total benefit	0	0	425	1,082	2,206	4,502	9,192	18,778	23,989	24,532	25,100
Net benefit	-270	-1,200	-1,840	-1,592	-1,489	649	4,769	14,506	19,118	19,704	20,265
(Real) IRR (percent)	52.85										

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5 Summary

It is important to judge these estimates in close connection with the assumptions that went into the estimation. For the detailed assumptions, refer to Appendix A. We have made the following key assumptions:

1. The integration of *Aadhaar* into government programmes takes place from 2 percent coverage of participants in 2012-13 to 100 percent coverage in 2018-2019. (The sequence is shown in the row 'Roll-out' in Table 5.)
2. The expenses incurred for developing and maintaining *Aadhaar* during the first seven years are those envisaged in the *Aadhaar* budget estimates. For the subsequent four years, we assume certain steady state costs of maintaining *Aadhaar*.
3. For this analysis, it is assumed that certain government programmes obtain improvements through *Aadhaar* integration. The schemes are: MNREGS, PDS, fertiliser and LPG subsidies, education, IAY, ASHA, ICDS, scholarships and pensions.
4. Leakage estimates for MNREGS and PDS are obtained from government reports and other studies. The estimated leakage is adjusted downwards by 25 percent to account for dated studies and technology improvements due to which leakages maybe lower now.
5. For other schemes, we assume leakages between 7-10 percent.

In conclusion, based on our assumptions, *Aadhaar* project has an internal rate of return in real terms of 52.85 percent to the government.

Appendices

A Assumptions

Table 2 lists all the common assumptions and Tables 3 and 4 list scheme specific assumptions that go into the estimation of benefits and costs in this paper. We assume that:

1. The cost of biometric device (POS device) is assumed at the rate of bulk purchase, and it is assumed that the cost of replacement every 3 years will fall.¹⁸
2. Training, device maintenance and support, and connectivity costs are assumed at the 2011-12 levels. There is an annual training cost of Rs. 500 per person trained. Each device will require Rs. 500 for maintenance support per annum. Connectivity costs are assumed at Rs. 1,200 per annum per device.
3. Wherever there is payment to be made through *Aadhaar*-enabled bank accounts, incentives to be paid to banks will be as follows: banks will be paid 3 percent of the value during the first 5 years, and 2.5 percent subsequently.
4. The real wage transferred in MNREGS will not go up over time.
5. The price of commodities transferred through the PDS will not go up over time.
6. Annual increase factor differs by scheme: For food grains, it is assumed to be 5 percent, given the upcoming changes in the food security schemes. For fertiliser subsidy, it is assumed that there will be a 2 percent annual decrease in subsidies, because the government has indicated it will rationalise and reduce these subsidies. For LPG subsidy, it is assumed that there will be no increase in the subsidy even due to population increase, because it seems likely that the government will either stagnate or reduce the subsidies, which is likely if reforms are brought to the subsidy regime. For all other schemes, an annual increase factor of 2 percent on account of population increase is assumed.

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B Benefits and costs: details

See Tables 5 and 6 for detailed break-up of benefits and costs of integration with *Aadhaar*.

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Table 2 Common assumptions underlying benefits and costs analysis

Variable	Units	Value
Project life cycle	years	11
POS device cost	Rs. per year	12,000 ^a
Depreciation rate	percent per year	33
POS maintenance cost	Rs. per device per year	500
Connectivity cost per device	Rs. per year	1,200
Training and support cost	Rs. per staff per year	500
Payment to bank	percent of transfer	3 ^b
Population increase	percent	2
a. It is assumed that the cost will fall every three years, so replacement cost is lower than purchase cost		
b. From the sixth year onwards, it falls to 2.5 percent of the value paid		

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Table 3 Scheme specific assumptions

Variable	Units	Value
MNREGS		
Wages disbursed	Rs. crore	24,864
Total units (1 unit per panchayat) (2009-10)	nos.	2,39,627
Leakage related to muster rolls	percent of wages	7
Leakage related to bank account disbursements	percent of wages	5
PDS		
PDS consumer subsidy on food grains (2010-11)	Rs. crore	45,000
Targeting / ID error for food grains	percent	16.7
Adjusted leakage for food grains	percent	12.5
Kerosene subsidy (2010-11)	Rs. crore	19,600
Kerosene leakage	percent	38
Targeting / ID error for kerosene	percent	11.1
Adjusted leakage for kerosene	percent of subsidy	8.3
Fair Price Shops (FPS)	nos.	4,77,000
POS devices per FPS	nos.	1
Fertiliser		
Subsidy (2010-11)	Rs. crore	62,301
Decrease in subsidies per year	percent	2
Shops	nos.	2,30,000
Leakage	percent of subsidy	7
LPG		
Subsidy (2009-10)	Rs. crore	16,071
Distributors	nos.	10,000
Units per distributor	nos.	5
Staff to be trained per distributor	nos.	5
Increase factor	percent	0
Leakage	percent of subsidy	10
Education		
Teacher salaries	Rs. crore	14,467
Expenses on books	Rs. crore	1,626
Expenses on uniforms	Rs. crore	998
Mid day meals (2010-11)	Rs. crore	7,759
Schools	nos.	12,37,000
POS devices per school	nos.	2
Staff per school (for training costs)	nos.	3
Leakage	percent of expenditure	10
IAY		
Houses sanctioned	nos.	19,52,914
Amount per unit	Rs.	45,000
Total expenditure (2010-11)	Rs. crore	8,788
Leakage	percent of expenditure	10

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Table 4 Assumptions: Other schemes

Variable	Units	Value
Leakage	percent of transfer	7
JSY		
Allocation	Rs. crore	1,600
ASHA		
Number of ASHAs	nos.	7,30,909
Average payment per ASHA	Rs. per annum	12,000
Total payments to ASHAs	Rs. crore	877
ICDS		
Number of Anganwadi workers	nos.	11,74,388
Average payment per Anganwadi worker	Rs. per annum	3,000
Number of Anganwadi helpers	nos.	11,04,098
Average payment per Anganwadi helper	Rs. per annum	1,500
Total payments to Anganwadi workers and helpers	Rs. crore	518
Scholarships		
Allocation	Rs. crore	4,519
Pensions		
Allocation	Rs. crore	5,110

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Table 5 Benefits of Aadhaar

Roll-out (percent)	(Rs. crore at constant prices)											
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2020-21	2020-21
MNREGS	0	2	5	10	20	40	80	100	-	-	-	-
PDS	0	61	155	317	646	1,318	2,688	3,427	3,496	3,566	3,566	3,566
Fertiliser subsidy	0	158	412	861	1,797	3,752	7,834	10,226	10,680	11,155	11,155	11,155
LPG subsidy	0	87	214	419	821	1,609	3,154	3,863	3,786	3,710	3,710	3,710
Education	0	32	80	161	321	643	1,286	1,607	1,607	1,607	1,607	1,607
IAY	0	50	127	259	528	1,078	2,199	2,803	2,859	2,917	2,917	2,917
Other schemes	0	18	47	95	194	396	808	1,030	1,050	1,071	1,071	1,071
Total Benefits	0	425	1,082	2,206	4,502	9,192	18,778	23,989	24,532	25,100	25,100	25,100

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Table 6 Costs of Aadhaar

(Rs. crore at constant prices)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Roll-out (percent)	0	0	2	5	10	20	40	80	100	100	100
Aadhaar costs^a											
Total exp.	270	1200	2182	2060	2379	2193	2102	1000	1000	1000	1000
Integration costs											
MNREGS	0	0	28	136	232	308	502	753	931	945	959
PDS	0	0	6	85	186	213	246	326	372	352	352
Fertiliser subsidy	0	0	3	77	153	165	191	210	232	212	212
LPG subsidy	0	0	1	62	123	126	131	119	124	104	104
Education	0	0	32	130	333	486	772	1,213	1,446	1,436	1,416
IAY	0	0	5	34	89	118	159	242	297	303	308
Other schemes	0	0	8	90	201	243	320	409	469	476	484
Total costs	270	1,200	2,265	2,674	3,696	3,853	4,423	4,272	4,871	4,828	4,835

a. Till 2011-12, the actual costs are presented. For subsequent years, the estimated costs are considered.

Notes

¹For example, Kapur and Chowdhury (2011) suggest that between 2006 and 2010, 37 lakh ration cards issued to households in the states of Bihar, Madhya Pradesh, Uttar Pradesh and Orissa were fake or had been issued to "ineligible" households. Similarly, PTI (2011) suggests that Karnataka has at least 30 lakh fake ration cards. Elsewhere, Radhakrishnan (2010) says that eight lakh bogus ration cards were detected and cancelled in 12 districts in Tamil Nadu.

²A more recent study (Khora, 2011a) calculates that in the year 2007-08, the proportion of food grains that did not reach households may have been lower than what is suggested in GOI (2005b), at 44 percent. However, Khora (2011a) does not suggest what proportion of this leakage is due to identification errors.

³See CPME (August 2008); Dréze *et al.* (2007); Dhuru (2007); CDE (2007b,a)

⁴Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

⁵For instance, Chauhan *et al.* (2009) found cases where workers performed one day's job, but their attendance was marked for 33 days. 32 days of wages were being misappropriated by people associated with the delivery of the scheme.

⁶Also see Dréze *et al.* (2007) where it was found in a survey of three districts of Orissa that only 60 percent of the days of employment recorded in the muster rolls could be confirmed by the concerned labourers, thus implying massive discrepancies in wage payments.

⁷In a survey conducted in 5 districts, it was found that in 86 percent of cases muster rolls were fabricated using forged signatures/ thumb impressions. Discrepancies were also noted between muster roll records and actual payments in five Gram Panchayats from four districts. The amount actually paid was just 18 percent of the amount paid according to muster rolls.

⁸In a survey conducted in Ranchi district in Jharkhand, only 67 percent of the wage payments entered in the muster rolls were found to be genuine.

⁹In 9 randomly selected sites in Surguja district in Chattisgarh, it was noted that 95 percent of the money paid to labourers according to the muster rolls actually reached them. However, the surveyors noted that they were able to verify the muster roll details for only 109 of the 270 randomly selected labourers as other labourers were not available or could not recall the payment details. It is however not clear whether this non-availability could be on account of ghost workers.

¹⁰The leakage estimate available in any one source is not representative of all states. The numbers range from 5 percent in Chattisgarh to almost 80 percent in Uttar Pradesh. We have assumed that the 31 states are broken into three equal categories: Worst performing (with leakage of 35 percent), reasonably performing (with leakage of 15 percent) and best performing (with leakage of 5 percent). The weighted average of the leakage is about 18 percent. For our analysis, we reduce the estimate to 12 percent.

¹¹The expenditure amounts as available at GOI (2011i) were updated only till 31 December 2011. The teacher salaries have been pro-rated to estimate the expenditure for the entire financial year from April 2011 till March 2012.

¹²The aggregate figure of Rs. 4,519 crores for scholarships is based on the Expenditure Budget (2012-13) for scholarships provided by the Ministry of Social Justice and Empowerment (GOI, 2012e), Ministry of Tribal Affairs (GOI, 2012f), Ministry of Minority Affairs (GOI, 2012g) and Ministry of Human Resource Development (GOI, 2012h).

¹³This includes the amount for Annapurna, where disbursement is not through a bank account, but since a breakup of the allocation is not available, we use the full amount

¹⁴These states are Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Assam, Rajasthan, Orissa and Jammu & Kashmir.

¹⁵See GOI (2011d) for population distribution across LPS and HPS.

¹⁶GOI (2011c) points out that over 8.5 lakh ASHA workers have been trained since 2005-06. However, the GOI (2011g) numbers are assumed for this calculation.

¹⁷In the latest budget (GOI, 2012k), the central government has approved a cumulative number of 14 lakh Anganwadi Centres/Mini Anganwadi Centres.

¹⁸For a detailed exposition of this price theory, see Nambiar and Poess (2011).

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A 'Cost-Benefit' Analysis of UID

REETIKA KHERA

A cost-benefit analysis by the National Institute of Public Finance and Policy of the benefits from Aadhaar integration with seven schemes throws up huge benefits that are based almost entirely on unrealistic assumptions. Further, the report does not take into account alternative technologies that could achieve the same or similar savings, possibly at lower cost.

A recent study released by the National Institute of Public Finance and Policy (NIPFP) presents an innovative "cost-benefit analysis" of the Unique Identification (UID) or Aadhaar project. This is, in principle, a welcome step towards more informed discussion and greater transparency of this project. On close examination, however, the widely-publicised conclusions of this study turn out to have a fragile basis.

In a nutshell, the NIPFP report covers the potential use of Aadhaar in seven major welfare schemes and subsidies. These are the public distribution system (PDS), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA, or simply NREGA), school education (including teacher salaries, mid-day meals, textbooks and uniforms), fertiliser subsidy, liquefied petroleum gas (LPG) subsidy, Indira Awaas Yojana (IAY), and payments in other schemes (pensions, Janani Suraksha Yojana, accredited social health activists and the Integrated Child Development Services). It estimates that linking these programmes to Aadhaar will lead to a "saving" of Rs 1 lakh crore over 10 years (Mathew 2012), and that after accounting for the costs of integration with Aadhaar the internal rate of return of the project will be over 50%.

Benefits from UID-Integration

The main question pertains to the benefits of integration with UID. The NIPFP report recognises that not all leakages in these programmes can be fixed by UID-integration. Only "bogus" beneficiaries,

ie, ghosts (eg, a dead person whose name remains on government records) and duplicates (one person getting benefits twice), can be weeded out.¹ Estimates of bogus beneficiaries are available for only two of the seven programmes considered in the NIPFP report (the PDS and NREGA).

For the PDS, the report uses the leakage estimates from a report of the Planning Commission published in 2005, based on the outdated data pertaining to 1997-2001.² That study estimated that 57% of PDS grain is diverted, of which, 17% was attributed to "ghost cards". The definition of ghost cards includes (a) below the poverty line (BPL) cards that are not in possession of their owners, and (b) the excess of the total number of ration cards over that of total households (ibid: 82). It is worth-mentioning here that PDS entitlements are fixed per household. It is quite possible that in some cases several members of a joint household obtained separate ration cards for their respective nuclear families. Whether this should count as a case of "ghost" cards, as the Planning Commission report assumes, is not entirely clear. In any case, there is no reliable and up-to-date estimate of the share of bogus cards in circulation.

For NREGA the report assumes that UID integration will lead to savings of 12% of total expenditure – 7% from "automation of muster rolls" and another 5% from linking NREGA bank accounts to Aadhaar (without explaining how these would curb corruption, eg, how automation of muster rolls helps to reduce leakages). If the idea is that some people who do not work manage to have their names on the muster rolls and wages are credited to their accounts (ie, are "bogus" beneficiaries), then this

I would like to thank Jean Drèze for helpful feedback.

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fraudulent practice can continue even if muster rolls are automated.

The real protection from wage corruption in NREGA comes through bank accounts as it separates the payment agency from the implementing agency.³ With bank accounts, wage corruption can still continue in three forms: collusion (where the bank staff and NREGA functionaries collude to inflate work attendance and credit wages into accounts of people who have not worked), extortion (when an official forcibly takes money from NREGA workers after it has been withdrawn from the bank account) and deception (when a worker's account is operated by NREGA functionaries without his or her knowledge). In the first two cases (collusion and extortion), linking accounts to UID will not help to reduce corruption. Only in cases of deception (or "identity fraud") can biometric authentication at the stage of withdrawal of wages help.⁴ Estimates of the breakdown of the different types of corruption are not available.

The NIPFP report also recognises that estimates of duplicates and ghosts are not available for many schemes. What is the correct way to make assumptions on benefits of UID-integration in such cases? There is no easy answer to this, so what the NIPFP report does is either to apply the estimates of leakages due to bogus beneficiaries for one scheme to another (e.g. in the case of fertiliser and LPG subsidies, the estimates applicable to the PDS are used),⁵ or – for the remaining schemes – to apply an arbitrary 7-10%.⁶

Although these assumptions are termed "conservative" (Patnaik 2012), available evidence – patchy as it is – suggests otherwise. For example, an estimate of fraud in six pension schemes has been made by the Society of Social Audit Accountability and Transparency (Department of Rural Development, Government of Andhra Pradesh) for July-October 2012. Six types of corruption are documented: "dead persons", "dual beneficiaries", "partial payments", "ineligible beneficiaries", "not paid but drawn" and "other". These social audit reports suggest that the total discrepancies in disbursement of pensions are around 2%.

Discrepancies due to dead beneficiaries and dual pensions – problems that Aadhaar can fix – are a subset of this 2%. The rate assumed by the NIPFP report is 7%.

While the report admits that there are no "robust" estimates of duplicates and ghosts, it provides little justification for the rates assumed in the cost-benefit analysis. Anticipating questions about the assumptions, the anonymous authors of the NIPFP report do upload the spreadsheet with their calculations, inviting readers to "modify the assumptions and explore alternative outcomes".⁷

Alternative Technologies

Biometric technology (of which Aadhaar is one variety) can help when there are bogus beneficiaries – ghosts or duplicates. Other, cheaper technologies (e.g. computerisation) can also help weed out bogus cards and help plug other leakages. Tamil Nadu has a fully computerised PDS database and overall PDS leakages are very small (4% in 2009-10). In states such as Chhattisgarh, overall leakages in the PDS have fallen from 50% (in 2004-05) to 10% (in 2009-10) without any use of Aadhaar, but through computerisation and other measures (Khara 2011b). The question a cost-benefit analysis should really address is whether Aadhaar is more cost-effective than these and other alternatives, including local biometrics (used in Andhra Pradesh). This question is raised in passing, but not answered in the NIPFP report (Patnaik 2012).⁸

Concluding Comments

In short, NIPFP's widely publicised cost-benefit analysis of UID is far from persuasive. It is almost entirely based on assumptions, not estimates, of the benefits of integration with Aadhaar. Where estimates (not assumptions) of bogus beneficiaries are used, they are unreliable or out of date. Further, the report does not take into account alternative technologies that could achieve the same or similar savings, possibly at lower cost.

The report also briefly considers the "costs" of integration of these schemes with Aadhaar. However, it makes no mention of the potential disruption that the integration exercise might cause.

Disruption could be at the stage of integration (e.g. old age pensioners may be unable to complete the required formalities) or during operations (e.g. software, connectivity or biometric failures). By assuming, with touching optimism, that the UID system is reliable and seamless, the report fails to address crucial concerns that have been raised about this adventurous project.

NOTES

- 1 For a detailed discussion on the types of corruption Aadhaar can weed out, see Khara (2011a).
- 2 "The reference period for the study was from 1997 to 2001 – the four-year period of the operation of TPDS. The household level information referred to the period from May to December 2001" (Planning Commission 2005: 13).
- 3 This practice has been in operation since 2008, except in Tamil Nadu. A few remote pockets were allowed to return to cash payments by Minister of Rural Development Jairam Ramesh in late 2011.
- 4 Note also that once those who were using "deception" to defraud the system, may turn to extortion and collusion once identity fraud becomes impossible.
- 5 The report states, "Using the estimates for PDS and MGNREGS as benchmarks, we assume that using Aadhaar-enabled system would result in a benefit of 7% of the total value of subsidies" (p 11) and "in the absence of such robust studies estimating the leakage from the system towards commercial use, we assume that use of Aadhaar would result in a benefit of 10% of the total value of the subsidy (similar to PDS)" (p 12).
- 6 See, for instance, p 10 where the report says, "In the absence of data on the extent of leakages that exist on account of fake and duplicate beneficiaries, we have assumed this figure to be 10% of the total expenditure incurred by the government on books and uniforms for school children".
- 7 Initial attempts (twice, at a three-day interval) to download the spreadsheet revealed that the spreadsheet was password protected. Now one out of seven worksheets can be modified. The practice of posting reports without author names is also observable with the documents on NREGA and PDS on the Unique Identification Authority of India (UIDAI's) website.
- 8 The cost-benefit work has been done by the MacroFinance group at NIPFP, a government-funded institution. The group has a project from UIDAI on financial inclusion which is perhaps why they focus only on UID. At the time of writing, no other paper on UID or financial

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inclusion was available on their website, raising the question whether the cost-benefit analysis itself was effectively sponsored by the UIDAI. Even if that is not the case, funding from the UIDAI to the MacroFinance group does create a possible conflict of interest, which would merit at least a short disclosure in the report.

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Response to 'A Cost-Benefit Analysis of UID'

SUMATHI CHANDRASHEKARAN, SHEKHAR H KUMAR, SMRITI PARSHEERA,
ILA PATNAIK, MADHAVI PUNDIT, SUYASH RAI, AJAY SHAH

A debate on the study
"A Cost-Benefit Analysis of
Aadhaar" conducted by the
National Institute of Public
Finance and Policy which
was discussed in the EPW of
2 February 2013.

This is in response to Khera (2013) ("the comment"), which criticises a cost-benefit analysis of Aadhaar (NIPFP 2012) ("the study") conducted by the National Institute of Public Finance and Policy (NIPFP).

The comment repeatedly takes qualifying statements from the study that were explicitly presented as limitations to the research and offers them to its reader as failings of the study. To a person reading only the comment and not the study, it would appear as though the authors of the study were either unaware of these impediments, or were trying to hide them.

The comment's central theme is to fault the study for being based on "unrealistic" assumptions. The study is elaborately careful in pointing out its limitations. For instance, it acknowledges that a "full-fledged cost-benefit analysis of Aadhaar" is difficult for two reasons: first, many gains from Aadhaar are difficult to quantify because they are intangible; and second, even if in specific schemes there may be tangible benefits, the information available on those schemes does not permit a precise quantification of those benefits. The comment's charge of the "conclusions of this study [having] a fragile basis" chooses to expressly ignore what is already stated in the study, and misleads a reader into believing that the basis of the study was deliberately misrepresented.

Faced with limitations in the existing statistical system and research literature, our strategy was to obtain a conservative result through two elements. First, many elements of the benefits which are not presently quantifiable are set to zero. Second, assumptions are shaded downwards when compared with the values seen in published studies,

in acknowledgement of the weaknesses of the existing published studies.

1 Specific Points

We now turn to some specific points raised in the comment. The comment raises doubts about the manner in which integration with Aadhaar can help curb corruption in the delivery of benefits under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). For NREGA to work effectively, two elements need to be addressed: there should be a mechanism to identify actual workers and a way to make accurate wage payments to them. Automating the maintenance of muster rolls, and carrying out authentication through Aadhaar, will help deal with corruption arising from embezzlement of funds on account of fake names and inflated days of work. This, coupled with use of Aadhaar-enabled bank accounts, will ensure that the wages are paid directly to the bank account of the worker whose presence is recorded in the muster rolls.

The comment identifies three forms of wage corruption in NREGA – collusion, extortion and deception – and concludes that Aadhaar can help with only the last category, where a worker's account is operated without her or his knowledge. However, this overlooks the benefits that may emerge from real-time monitoring of NREGA through Aadhaar. The study envisages that Aadhaar can be used not just to monitor the number of workers engaged in a project but also to sanction and track the materials used for the work. By comparing actual project performance with the number of workers and work days required, and the quantity of materials needed, the government will be better positioned to check the problem of collusion (i.e., wage payments should correspond with the actual completion of work).

The comment also suggests that the assumptions in the study are not "conservative". The comment points to a social audit in Andhra Pradesh¹ that suggests 2% leakage, but critiques the study for assuming a national leakage of 7%. The study has steered away from relying

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exclusively on analyses of isolated and small sample sets. Doing so would have come with the obvious risk of failing to take into account the differences in the level of development, government policies and use of technology within and across states in India.

The comment has similar concerns with the study's assumption of an aggregate benefit of 12.5% through a reduction in leakages in the public distribution system (PDS) due to the use of Aadhaar. In this regard, the comment points to a report that argues that leakages from PDS were relatively lower in Tamil Nadu (4%) and Chhattisgarh (10%). Here, the comment once again selectively represents information to its reader. It is well documented in Indian public policy literature that Tamil Nadu and Chhattisgarh have performed relatively better than other states in the implementation of PDS. For instance, the commentator herself (Khara 2012), points out that Tamil Nadu and Chhattisgarh have achieved significant reduction in leakages through the use of computerised databases, but then goes on to conclude that the overall diversion rate in the PDS remains at 41%.

Here, too, the study assumed an average value for leakages on a national basis, reflecting a middle ground between states that might display considerable extremes in service delivery performance. The comment is unreasonable in suggesting that the study's assumption of 12.5% benefit from introducing Aadhaar in PDS is off the mark.

The comment criticises the study for having relied on "outdated data",² failing to recognise two issues in this regard: first, the study could not have relied on contemporary data for some of the assumptions, as leakage studies that are nationally representative do not exist. Second, the study was entirely aware of the age of some of the data, and as well as the positive changes that may have occurred since then, and had correspondingly discounted the estimated leakage in certain schemes (NREGA and PDS) downwards by a quarter from the estimates in the literature.

The comment argues that the study has failed to account for "alternative technologies that could achieve the

same or similar savings". In doing so, the comment fails to appreciate the primary objective of the study: its central question was to ask whether the expected benefits of Aadhaar outweighed its total expected costs. Such a question methodologically leads to a cost-benefit analysis, and not a cost-effectiveness analysis, where the former calculates and compares the costs and benefits of a single (policy) intervention, and the latter calculates and compares the costs and benefits of two or more interventions. The study explicitly aspired to being a cost-benefit analysis, and should not be criticised for not conducting a study of the relative benefits of different forms of service delivery.

The comment also refers to the lack of author names in the study but the study can hardly be accused of having been brought out in anonymity. NIPFP is a prominent think tank, which regularly conducts and publishes influential research on public finance and policy, as does the Macro/Finance group within the institute. The group's ownership of the study was prominently displayed on the top-right corner of the title page of the study. The group website, where a copy of the study can be downloaded, also lists the names and designations of all the members of the team, the authors of this reply being some of them.³ The absence of individual names does not take away from the stated ownership of the study, and is in line with the practice followed by top research institutions worldwide.

The commentator's last note is well taken, and a disclosure of the group's research affiliations with the Unique Identification Authority of India (UIDAI) should preferably have been made in the study itself. At the same time, the group's affiliations are public knowledge on its website.

2 Conclusions

In an ideal world, it would be possible to precisely quantify the costs and benefits of building Aadhaar. In the world that we live in, such precise quantification is not possible owing to weaknesses of information and research. This problem is not unique to Aadhaar: most important questions in public policy in India are hard to analyse owing to the low quality

of the statistical system and available economic research.

This leaves two alternatives. One strategy that was undertaken by our group is that of doing careful analysis that is mindful of difficulties in available research and makes conservative assumptions every step of the way. The other strategy is that of adopting policy positions without analysis.

The path to rational policy analysis lies in the former. The decision to build Aadhaar must necessarily be studied to the best extent possible, in order to better evaluate the trade-offs. Parliament has rightly asked for a cost-benefit analysis of Aadhaar (Standing Committee on Finance 2011-12, p 23). Similar calculations should be undertaken for all spending decisions of the Indian state. The study attempts to make the best use of reliable available data, and clearly acknowledges the need to improve the analysis as more knowledge becomes available.

In the debate on the Aadhaar project, there are strong views on both sides. When our group embarked on the cost-benefit analysis of Aadhaar, we were keen to make a break with the existing towards, to carry the debate forward towards more rational analysis. The centrepiece of the study is a spreadsheet, which implements the entire analysis, which has been released in the public domain.

In this spreadsheet, all the calculations and assumptions are laid bare. It is possible for readers and critics to modify the key assumptions, particularly as and when fresh knowledge and information is generated, to study the change in results. The title page of the study has the following note: "the spreadsheet for the cost-benefit analysis, with the details of the assumptions and calculations has been released on the web at <http://goo.gl/JzwaV>. This will assist other researchers

Style Sheet for Authors

While preparing their articles for submission, contributors are requested to follow EPW's style sheet.

The style sheet is posted on EPW's web site at <http://www.epw.in/terms-policy/style-sheet.html>. It will help immensely for faster processing and error-free editing if writers follow the guidelines in the style sheet, especially with regard to citation and preparation of references.

DISCUSSION

and policy analysts to modify key assumptions and explore alternative outcomes".⁴

For substantive policy analysis and debate about the cost-benefit analysis of Aadhaar, careful work at the level of this spreadsheet is required. The group would be delighted if those interested in public policy would delve into the spreadsheet, modifies assumptions based on new research and information that has come out, and write new policy papers using it.

NOTES

- 1 The comment refers to "an estimate of fraud in six pension schemes ... made by the Society of Social Audit Accountability and Transparency (Department of Rural Development, Government of Andhra Pradesh) for July-October 2012." A citation for this estimate would have been

helpful. However, the estimate may not have been suitable for the study mainly because it would not be considered a representative estimate for the cost-benefit analysis. It is also useful to note that the study was published in November 2012, and research for the study would have concluded well before information about the estimate became available (the estimate tracks fraud from July to October 2012).

- 2 In particular, the comment refers to a 2005 study by the Planning Commission on PDS (Government of India 2005).
- 3 See <http://macrofinance.nipfp.org.in/people.html>
- 4 The comment was concerned that only one worksheet in the spreadsheet attached to the study could be edited. This was the objective: to focus the analysis on the key assumptions and explore how they could be modified.

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On the NIPFP Response

REETIKA KHERA

Before I take issue with some of the points made in the NIPFP response to this comment, it may be useful to recapitulate a few points on which there appears to be agreement: (1) Aadhaar-integration can resolve only certain types of leakages, for which reliable data is unavailable; this was not adequately accounted for in the cost-benefit exercise; (2) the NIPFP study has a fragile basis (in particular, the estimated "rate of return" on unique identification (UID) number builds on a whole series of ad hoc assumptions); (3) the study is conducted by a research group that receives funds from Unique Identification Authority of India (UIDAI), "without disclosure".

In spite of these limitation, the conclusions ("50% rate of return") were handsomely played up in the media, including a newspaper in which one of the principal authors is a consulting editor (see "Large Returns Expected from Aadhaar", *Indian Express*, 10 November 2012). The main purpose of the comment was to draw attention to the details of the NIPFP study which, unfortunately, were swept aside in the public discussion. Instead, the ad hoc

assumptions were repeatedly termed "conservative" or "modest".

On Benefits: Lack of Data

The NIPFP study and the response use "overall leakages" (total corruption due to, say, leakage at the state food depot, at the ration shop, due to duplicates, in the case of the public distribution system (PDS)) and "Aadhaar-relevant leakages" (i.e., leakages that Aadhaar-integration can resolve, e.g., duplication) interchangeably. Using estimates of overall leakages has the effect of exaggerating the benefits of Aadhaar-integration, so the assumptions are not "conservative". When estimates of Aadhaar-relevant leakages exist, the study and response admit, they are outdated.²

The NIPFP response states "The study has steered away from relying exclusively on analyses of isolated and small sample sets". I would like to draw attention to the evidence that the NIPFP study relied on. For ASHAs, Janani Suraksha Yojana and scholarships, no analysis, large or small has been used. For the Indira Awaas Yojana, the three analyses relied on exclusively are a *Times of India* news report, a press release based on a discussion in Parliament

and a "Scheme Brief" by the Institute for Financial Management and Research (IFMR). Interestingly, the corruption estimate in the IFMR brief cross-refers to the *Times of India* article (apart from a CAG report)! Similar issues arise with the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) data which generally relies on small, often single-state, samples drawn from one to three districts. An all India average of "overall leakages" (not Aadhaar-relevant leakages) relies on these small sample estimates. Nationally representative estimates of overall leakages using National Sample Survey Office data were published in 2011 (see Imbert and Papp 2011).

The fact remains that, at the moment, we do not have reliable estimates of "Aadhaar-relevant leakages" for most schemes. This is acknowledged in the NIPFP study and response.³ The lack of reliable information on these issues was the crux of the problem and the main point of my comment.

Other Issues

The NIPFP response claims that I am selective in citing PDS corruption data, even though they themselves extensively cite my estimates of PDS (overall) leakages published elsewhere. All of my estimation of corruption in several welfare schemes is in the public domain. Further, the low leakages in Chhattisgarh and Tamil Nadu were discussed in the context of

the availability, and benefits, of alternate technologies (end-to-end computerisation, in this case, used in these two states).

The NIPFP response brushes aside the question of alternate technologies. But as they ascribe benefits that accrue from other technologies (e.g. real time monitoring of the number of labourers requires computerisation and is possible without Aadhaar) to Aadhaar-integration, they have to take alternatives into account. Further, the NIPFP response states that the government had to undertake a cost-benefit analysis after the National Identification Authority of India Bill (NIDAI Bill) was rejected in totality by the relevant Standing Committee (on Finance). Apart from the oversight regarding the disclaimer on the "affiliation" between UIDAI and the Macro/Finance group of NIPFP, a larger question on the process of policymaking also arises.⁴

The authors' proposal on material corruption in NREGA is without merit. They suggest controlling material corruption in NREGA by linking material costs with number of labourers. The share of material in total costs depends, not on the number of labourers (as they suggest), but on the nature of the project. Material costs per

labourer are very high for wells, but close to zero for land-levelling. If, as NIPFP proposes, there should be a fixed ratio between labourers and material costs, then in the case of wells, their proposal will lead to collapsed wells and for land-levelling, it would open the door to material corruption.⁵

Even on the cost side, which I completely ignored earlier, there are problems. The NIPFP study budgets Rs 1,200/year for connectivity (Table 2, NIPFP study) for payments of each Aadhaar-enabled scheme. As each authentication is likely to cost Re 1, only 1,200 beneficiaries per gram panchayat are envisioned to be paid each year. This translates to 100 transactions each month – which is certainly too few for the PDS and NREGA.

In Conclusion

I agree with the NIPFP authors that the way forward is "careful analysis that is mindful of difficulties in available research". When available research is fraught with problems acknowledged throughout the NIPFP study and response, the "path to rational policymaking" lies in doing the hard work, i.e., undertaking more and

larger studies to estimate Aadhaar-relevant leakages.

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NOTES

- 1 Here is an example: "Automating the maintenance of muster rolls, and carrying out authentication through Aadhaar, will help deal with corruption arising from embezzlement of funds on account of fake names and inflated days of work". "Inflated days of work" is due to collusion which is not an Aadhaar-leakage. "Fake names" can either be non-existent persons with bank accounts operated by living persons (highly unlikely) or collusion (local officials collude with a worker to defraud the system without doing any work).
- 2 To apply a "discount" factor (to account for recent improvements), also requires some factual data which are not available.
- 3 For instance, in the NIPFP response they admit that "the study could not have relied on contemporary data for some of the assumptions, as leakage studies that are nationally representative do not exist". (This also contradicts an earlier statement that they "steered away from relying exclusively on analyses of isolated and small sample sets".)
- 4 I leave aside the minor issue of authorship (which the NIPFP response concedes) only by stating that every other publications of the group authorship has been clearly stated on their website.
- 5 Further, there are peaks and ebbs in material use for any work.

REFERENCE

- Imbert, Clement and John Papp (2011): "Estimating Leakages in India's Employment Guarantee" in Reetika Khera (ed.), *The Battle for Employment Guarantee* (New Delhi: Oxford University Press).

Women and Work

Edited by

PADMINI SWAMINATHAN



The notion of 'work and employment' for women is complex. In India, fewer women participate in employment compared to men. While economic factors determine men's participation in employment, women's participation depends on diverse reasons and is often rooted in a complex interplay of economic, cultural, social and personal factors.

The introduction talks of the oppression faced by wage-earning women due to patriarchal norms and capitalist relations of production, while demonstrating how policies and programmes based on national income accounts and labour force surveys seriously disadvantage women.

This volume analyses the concept of 'work', the economic contribution of women, and the consequences of gendering of work, while focusing on women engaged in varied work in different parts of India, living and working in dismal conditions, and earning paltry incomes.

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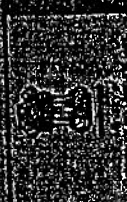
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We are conducting a pilot project for introduction of Aadhaar numbers based on domestic LPG use in your area for the first time in the Country and we solicit your active role in this project by registering/enrolling and getting your Aadhaar Number. We are also requesting you to provide Aadhaar Numbers of all your family members, your Bank Account number, IFSC Code and Name of Bank and Branch to your distributor.

The major objective of this enhanced delivery system is to ensure that only customers who have registered their Aadhaar Numbers and provided Bank Account details will be supplied Domestic use after due authentication. This will ensure timely delivery of refills to you and prevent refills which may take place in absence of authentication at the time of delivery.

We also plan to extend the pilot for transferring the subsidy amount directly to your bank account. For this, the information of the bank and your account number is very important.

We will appreciate that when the above mentioned pilot project starts, we will restrict LPG delivery only to those who have registered Aadhaar numbers with the distributor. In case you do not have Aadhaar number, we request you, therefore, to obtain it immediately.

You are also requested to provide the following details through the enclosed self-addressed envelope, latest by 31st October 2011 in the format provided below along with photocopies of the documents confirming Aadhaar numbers of you and your family members and a copy of the cheque showing the balance of your Bank Account.

If you do not have UID number for yourself and/or family members, kindly visit the nearest enrolment centre set up by State Government in your area or our distributorship with necessary documents to complete enrolment immediately. If you are provided with Enrolment ID (EID) and not UID, kindly bring it in the attached format. For assistance please call our distributor on 020-64008111 or 020-26682299 (SAMAYAK INDANE GAS) / 9850886670 (RENUKA GAS).

GOVERNMENT OF NCT OF DELHI
REVENUE DEPARTMENT
5, SHAM NATH MARG DELHI-110054.

ANNA-7C

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No. F.10(6)/CCS/DivCom/Hqrs/ 5130 - 5131

Dated: 20.12.2012

ORDER

It has been decided to use the Aadhaar platform for the delivery of various services rendered by the Revenue Department. Hence, it is considered necessary that the Aadhaar information of the applicants seeking the various services from the Revenue Department is to be compulsorily given at the time of applying for the service.

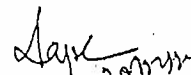
It is henceforth ordered that AADHAAR No. of the applicant, will be required to be mentioned compulsorily at the time of applying various services as mentioned below. The Aadhaar Card information of the applicants should be mentioned in the prescribed Application Forms.

1. Registration of Marriages under Hindu Marriage Act.
2. Registration of Marriages under Special Marriage Act.
3. Solemnization of Marriages.
4. Registration of various documents in the Sub Registrar Offices.

Specimen of the modified Application forms of the above services are available on the website of Revenue Department (<http://revenue.delhi.gov.in>). The guidelines on "How to Integrate the Aadhaar for the various services rendered by Revenue Department, GNCTD" are also available at this link and are enclosed with this order.

All the Deputy Commissioners are directed to ensure that this order is prominently displayed in the Notice Boards of the respective districts. General public may also be informed through permanent display of these conditions in the Notice Boards of the Revenue Department/District and also in the offices of Sub Registrar Offices. This order will come into effect from January 1, 2013.

This issues with the prior approval of the Secretary (Revenue).


(Rajiv Kumar)
SDM (HQ)

No. F.10(6)/CCS/DivCom/Hqrs/
Copy to:-

Dated:

1. All Deputy Commissioners, Delhi
2. All ADMs, Delhi

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3. All SDMs, Delhi
4. All Tehsildars, Delhi
5. All Sub Registrars, Delhi
6. All SDMs (Hqrs)
7. SIO, Delhi State NIC HQ, Delhi Sectt, IP Estate, Delhi.
8. System Analyst to upload the order on the department's website
9. OSD to the Chief Secretary
10. PS to Secretary (Revenue)
11. PA to Special Secretary (Revenue)

Rajiv Kumar
(Rajiv Kumar)
SDM (HQ)

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GOVERNMENT OF NCT OF DELHI
REVENUE DEPARTMENT
5, SHAM NATH MARG DELHI-110054.

No. F.10(6)/CCS/DivCom/Hqrs/ 5130-5131

Dated: 20.12.2012

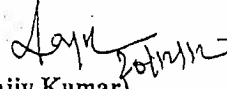
GUIDELINES / STEPS ON
HOW TO INTEGRATE THE AADHAAR NUMBER FOR VARIOUS SERVICES
RENDERED BY REVENUE DEPARTMENT

These guidelines are applicable for the following services.

- Issue of certificates for SC/ST, OBC, Income, Domicile, Surviving Member, Solvency and Nationality.
- Issue of delayed Birth and Death orders.
- Registration of Marriages under Hindu and Special Marriage Act.
- Solemnization of Marriages.
- Registration of various documents, deeds etc. at Sub Registrar Offices.

Guidelines / Steps

1. The applicant will submit the application form along with the supporting documents and also a copy of Aadhaar Card.
2. The application will only be accepted if the applicant's name, photo and address on Aadhaar Number matched with the details on the application form.
3. If Aadhaar No. has not yet been received, the applicant may provide the Aadhaar Enrolment No. details and any other identity proof (PAN/ Voter's Card / Passport / Driving License / Office ID Card).
4. The photograph of the applicant will be taken by the concerned office.


(Rajiv Kumar)
SDM (HQ)